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NANGA PARBAT

Incorporating the Official Report of the Expedition of 1953

KARL M. HERRLIGKOFFER

Translated and additional material supplied by

ELEANOR BROCKETT AND ANTON EHRENZWEIG

FOREWORD BY

BRIG. SIR JOHN HUNT

LONDON
ELEK BOOKS

Published 1954

by Elek Books Ltd.
14 Great James St.,
London, W.C.1.

and simultaneously in Canada by the
Ryerson Press,
299 Queen Street,
Toronto 2b
Canada

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Printed in Great Britain
by Page Bros. (Norwich) Ltd.,
Norwich

In Memory of my Brother

WILLY MERKL

* * *

To

OUR MOTHER

In affection and esteem

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FOREWORD

WITH THEIR splendid ascent of Nanga Parbat the Austro-German expedition has brought to a triumphant conclusion an epic story of endeavour and sacrifice which is as close to the hearts of all Austrian and German mountaineers as that of Everest to us British. Nanga Parbat is among the first eight or nine highest summits in the world and, because of its heavy glaciation and the climatic conditions prevailing in that region, one of the most formidable mountaineering problems in the Himalaya. Although it was first attempted by a famous English climber Mummery, with two British companions and a few Gurkhas towards the end of the last century, it has become a peculiarly German preserve owing to the gallant attempts of three expeditions composed of Austro-German mountaineers during the 1930s. These efforts failed with heavy loss of life. No small part of the tribute due to that fine climber, their leader Aschenbrenner, is that he has succeeded this year without accidents or injuries in his party.

We of the British Everest team salute our Austro-German comrades; in doing so, we honour the deeds of Willy Merkl, Paul Bauer and other fine climbers who went before them.

June, 1953 JOHN HUNT.

INTRODUCTION

DR. KARL HERRLIGKOFFER, organizer of the Willy Merkl Memorial Expedition to Nanga Parbat, was in the summer of 1953 able to fulfil a sacred trust. During the decade 1930-40 many of Germany's best climbers and with them their faithful porters, lost their lives in assaults on this tragic mountain. In taking up the challenge in 1953 Karl Herrligkoffer assumed a great responsibility.

Every member of the victorious team is to be congratulated on his skill and courage in the face of extraordinary difficulties and none will fail to acknowledge also the unusual organizing ability and sheer determination of the author of this book.

The Munich Branch of the German Alpine Club, whose junior members, trained in the school of Dr. Leuch, had produced men of Himalayan calibre in previous years, was able to make a significant contribution to this enterprise, for out of a team of ten, no less than three were Munich Branch men. For this reason alone we felt closely identified with the expedition and supported it without reservation.

All Germans, not only mountaineers, must rejoice that the Nanga Parbat Expedition of 1953 has done so much to enhance the nation's prestige.

A. NUBER
President of the Munich Branch
of the German Alpine Club.

Munich, 20*th November*, 1953.

AUTHOR'S PREFACE

to the German edition

HIMALAYA, legendary mountain world of Asia, about it the aura which transfigures everything in this world that seems vast, perilous and inaccessible! Once it was the undiscovered continents, later the unknown interiors of Africa and Asia, and more recently the two poles which challenged the explorers of every nation. To-day man is lured by the highest peaks of the world's mountains and by the unfathomable depths of the seas. Material considerations of purpose and usefulness have no place in his thoughts.

This question of the ultimate purpose of expeditions of exploration has always been a matter of controversy. On the one hand are those who are utterly out of sympathy with enterprise of this nature, regarding it in fact with scorn. But there are always others, albeit few, who recognize victory even in defeat when the struggle has been for a high ideal. Indeed a taste for adventure is of the very essence of human nature.

Actually every Himalayan expedition can claim some considerable accomplishment in the field of scientific research but this cannot compare with the glorious achievement of men like Scott, Amundsen, Nansen, Wegener, Irvine, and Mallory, or, on Nanga Parbat, of Mummery, Merkl, Welzenbach, Wieland, Wien and Fankhauser, who invested their seemingly purposeless striving with the glory of unsurpassed heroism.

Before passing on to my account of the Nanga Parbat Expedition of 1953 I wish to record my sincere gratitude to the original publisher of this book, Herr Otto Spatz of J. F. Lehmanns Verlag, Munich. He demonstrated his confidence in the project by promising financial backing at a very early stage and remained our steadfast supporter and champion throughout the period of the expedition.

The meteorological appendix to the German edition by Professor Flohn of Bad Kissingen is based on the weather observations made on the mountain by Albert Bitterling of Berchtesgaden. I am also indebted to Professor Dr. Reichel of Munich for advice on matters of high altitude physiology.

KARL M. HERRLIGKOFFER

Munich, *Christmas* 1953.

TRANSLATORS' INTRODUCTION

THREE GREAT Himalayan ascents—Annapurna, then Everest, now Nanga Parbat—have been crowded into the first three years of this half-century. The men who reached these sublime heights climbed on the shoulders of their great predecessors and were supported by expeditions which involved highly complex organization and prodigious finance. Nonetheless, the spirit which inspires this hazardous high altitude climbing is so little taken for granted, even by its exponents, that no published account of a mountaineering expedition now seems to be complete unless it carries, like a flag, its attempt at self-justification, even if this takes the typically understated form of the British assertion that "we climb Everest because it is there."

It is clear that the climbing of mountains means different things to different nationalities, and again to different individuals. It is also true that individual climbers have special "feelings" about certain mountains. The relationship of the German climbers to the fabulous mountain of Nanga Parbat whose summit finally fell to their assault in 1953 was something unique, being strangely strong and close. The late F. S. Smythe has recorded that when he and Eric Shipton proposed making an attempt on Nanga Parbat they received indignant letters from Germany to the effect that the mountain was Germany's and that it was unsporting of a British expedition to try. This relationship was compounded of fascination and dread, and had gestated for years in a soil of unimaginable tragedy.

Dr. Herrligkoffer's book is a highly individual account of a highly individual enterprise and the translator stands between the work in its original form and a reading public, not only of another language but with different standards, a different background and with different habits of thought. The justification for a Translators' Introduction is that it should form a bridge over which the written work may pass from one climate into another.

By the time the Nanga Parbat expedition of 1953 was launched no fewer than thirty-one men, climbers and porters, had perished on the mountain, some of them in circumstances, the very thought of which was unendurable to their surviving comrades. The years 1934 and 1937, when the German teams met with unparalleled disaster, sound like death knells in the history of Himalayan climbing, and while the expedition of 1938 returned unsuccessful but intact, the climbers in that year had had the gruesome experience of finding on their route some of the corpses of 1934. Not surprisingly in 1953, every minor ailment, every storm, every avalanche, every landmark, yes, every date—for the ascent was always made at the same season—was invested with the power to bring dark memories crowding in. Indeed the expedition was launched as a memorial, and it was the avowed aim of the climbers to "fulfil a sacred trust" and to put the seal of victory on the efforts of the dead. The rousing send-off from home, the thrill of the voyage out and the air-trip to the foothills, the keen anticipation of the approach, the comradeship of the evenings in camp—such hearty enjoyments are part and parcel of a Himalayan expedition, but in this case a gloomy sense of foreboding was always near the surface, ready to break through at the slightest hint of adversity.

There was yet another factor which introduced a sombre undercurrent. Karl Herrligkoffer is a half-brother of Willy Merkl, hero of Nanga Parbat, who in 1934 died the most lingering and tragic death of all. Dr. Herrligkoffer's enthusiasm, which swept all before it in the organizing of the expedition, sprang more from admiration for his dead kinsman than from an expert knowledge of Himalayan climbing of which he had no direct experience. In 1939 a crack team had been sent out to Nanga Parbat under the auspices of the German Himalaya Foundation to reconnoitre an alternative route. This route was deemed to be feasible and plans had already been laid to launch a full-scale expedition over the new route in 1940, when the Second World War intervened. Dr. Herrligkoffer who proposed to follow the old Merkl route, had to surmount much opposition and even antagonism from official German climbing circles and had to organize and equip his expedition quite independently with none of the support and backing such as the successful Everest expedition of the same year could claim. It seems possible, therefore, that the team's will to prove itself and to succeed was intensified, not only by a sense of obligation to the dead, but also by this initial struggle for its very existence. Moreover, while the climbers were storm-bound in the intermediate camps news came through of the British success on Everest. It is recorded that this made them feel "doubly committed" to their task, one of the climbers going so far as to say that now they must succeed and if possible without oxygen. Thus the team was thrice goaded. How different was this tense struggle from the calm, detached attitude of the sportsman.

That this general state of tension should have produced tensions within the team itself seems almost inevitable; yet, as Dr. Herrligkoffer says, seen over the perspective of the years to come it is the achievement and the achievement alone which will remain. Its periphery of unhappy circumstances will have been entirely forgotten.

Although each succeeding Himalayan expedition has been more and more elaborately planned and equipped, Hermann Buhl in his solo dash to the summit of Nanga Parbat, without tent, food or oxygen equipment, steps clear of the contemporary network of logistic planning and takes one right back to 1895 and A. F. Mummery, who led the first expedition of all to Nanga Parbat. Mummery, like Buhl, was fond of striking out alone and chancing his arm. But, as Smythe has said, Mummery climbed "simply and solely for the fun of the thing". There was precious little fun in the German approach to Nanga Parbat. At the time when Buhl was fighting his grim battle against exhaustion on the Silver Saddle, his comrades, not far away, were fixing a memorial tablet to the dark granite crag on the East Arête known as the Moor's Head and conducting a ceremony to honour the dead. Dr. Herrligkoffer at Base Camp had by means of the radio connection with the high camps urged rescue operations without delay but had received only a negative answer which he records without comment. This incident expresses the heavy mood of the whole enterprise which moved up the mountain weighed down by thoughts of doom and death.

The story of Nanga Parbat is a long one. It is a tragic and in many ways a puzzling story. Human nature, ever inexhaustible, offers here another facet for study. But Nanga Parbat has been climbed. The dead in their vast and icy tomb may sleep.

It is the pleasant duty of the translators to acknowledge their indebtedness to Major T. S. Blakeney, Secretary of the Alpine Club, to Mr. C. J. O. Harrison of the Library Staff of the Royal Geographical Society, and to Mr. G. J. Evans, Librarian of the Meteorological Office, Harrow. Thanks are also due to the Himalayan Club and to the Editor of the *Himalayan Journal*, Colonel H. W. Tobin, for his kind permission to quote from the *Journal*.

ELEANOR BROCKETT
ANTON EHRENZWEIG

London, *May* 1954

BOOK ONE

by

ELEANOR BROCKETT

and

ANTON EHRENZWEIG*

TRAGEDIES

The Mountain

The British Expedition of 1895

The German-American Expedition of 1932

The German Expedition of 1934

The German Expedition of 1937

The German Expedition of 1938

The Reconnaissance of 1939

The Winter Escapade of 1950

Erwin Schneider's Summing Up

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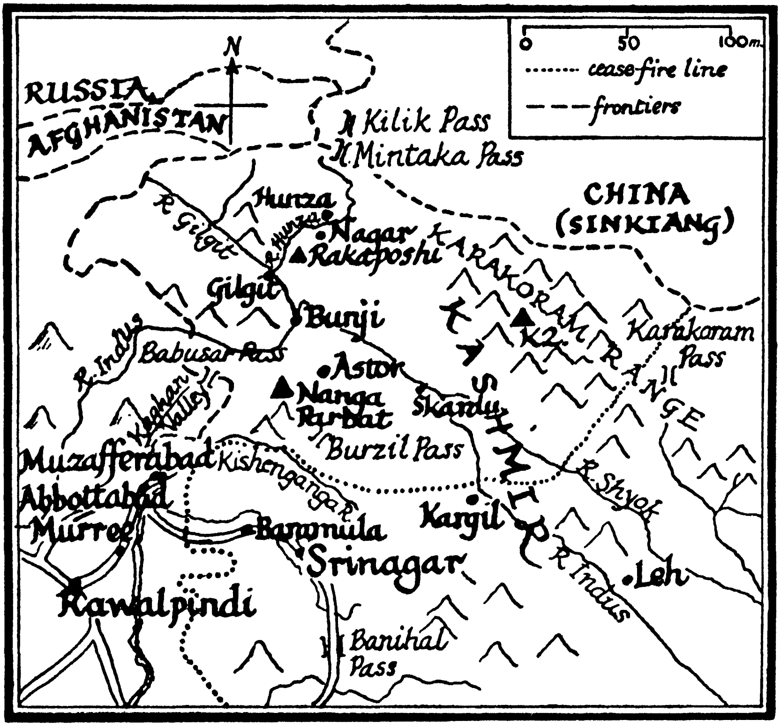
*Fullest use has been made of the short chapter GESCHICHTLICHER ÜBERBLICK in the official report of the 1953 Expedition by Dr. Karl Herrligkoffer.

CHAPTER I

The Mountain

THE PROBLEMS which confront the climber in the Himalaya are of a quite different order from those which are likely to be encountered in the Alps. In the latter case the mountaineer is required to make a supreme mental and physical effort for the maximum period of a few days. The Himalaya demand that this strain be endured for weeks, even months on end. A severe Alpine ascent requires the climber to make an immense effort of will leading up to a quick all-out thrust. In the Himalaya the decisive factor is the ability to sustain effort and expend energy over a protracted period of exposure and strain. Tolerance, co-operation and readiness to subordinate personal ambition to the common objective, while not excluding the ability to carry on alone if necessary—these are the formidable demands the mountains of the Himalaya make of those who would climb them.

After the German-American Himalayan expedition of 1932, Nanga Parbat became known as the German mountain of the East. She stands, 26,620 feet high, forming the westernmost bastion of the 1,500 mile long Himalaya range, near the northern border of Kashmir, in one of the strategically most important areas of the world, isolated by the rigid frontiers of Tibet to the east, Chinese Turkestan (Sinkiang) to the north and Soviet Russia to the north-west. Another frontier has sprung up of late close to the southern face of the mountain: the cease-fire line, guarded by the United Nations, which now divides Kashmir into two hermetically sealed halves. The summit lies in the Pakistani-held north-western border territory and is now cut off from its Indian-held hinterland, the famous Vale of Kashmir, from which the early expeditions set out. To-day the high Babusar Pass has become the only surface approach which lies entirely within Pakistan. This approach keeps to the west of the mountain and leads into the gorge of the Indus river which skirts the mountain to the north. The old, now blocked, "Gilgit Road" leads from Srinagar in the Vale of Kashmir along an old caravan route astride the eastern flank of the mountain and also runs into the Indus gorge to the north.


0
50
100m.
cease-fire line
frontiers
N
RUSSIA
AFGHANISTAN
Kilik Pass
Mintaka Pass
CHINA (SINKIANG)
Hunza
R. Gilgit
R. Hunza
Nagar
Rakaposhi
KARAKORAM RANGE
Gilgit
Bunji
K2
Karakoram Pass
R. Indus
Babusar Pass
Kaghan Valley
Astor
Nanga Parbat
Skardu
Burzil Pass
Muzafferabad
Kishenganga R.
R. Shyok
Abbottabad
Murree
Baramula
Kargil
Srinagar
R. Indus
Leh
Rawalpindi
Banihal Pass

Map of Kashmir

Most famous peaks of Central Asia rise from amidst a cluster or chain of similarly high peaks and their superior height is often established only by meticulous surveying. The eminence of Nanga Parbat is beyond question. Dwarfing all mountains around, she soars to her immense height in majestic isolation. The South Wall, with Kashmir at its feet, rises above the Rupal valley as one of the greatest precipices of the world, a sheer face of 15,000 to 16,000 feet. The eternal snows cannot cling to it as they cling to the north side, and the Bazhin glacier, fed by the ice avalanches breaking continuously from above, starts miles below the summit.

To its east and west, too, the mountain is bounded by deep narrow gorges, the Astor and Bunar valleys, and it is only towards the north, to the sun-scorched valley of the Indus, that the massif slopes rather than plunges.

The Indus reaches Nanga Parbat from Central Tibet after having drained all the mountain ranges north of the enormous watershed represented by the Himalaya, and the juxtaposition of this mighty river and the gigantic pile of Nanga Parbat produces what is considered to be the greatest relative difference of height in the world: from the floor of the Indus valley, 3,000 feet above sea level, to the summit of Nanga Parbat at 26,620 feet.

All valleys of Nanga Parbat ultimately lead to the inhospitable desert of the Indus gorge which in its desolation offers no outlet to the south. Hence the approach to the mountain presents its own problems. The western route across the Babusar Pass and the eastern approach across the Tragbal and Burzil Passes, both over 150 miles long, traverse heights equal to the Jungfraujoch and are impassable for normal traffic for the greater part of the year. Most Nanga Parbat expeditions have had to lead their caravans of porters through blizzards and deep snow. The victorious expedition of 1953 had the good fortune to be able to make use of the military air route from Rawalpindi over the Babusar Pass to Gilgit, and thus save the time and effort formerly expended on the approach.

CHAPTER II

The British Expedition of 1895

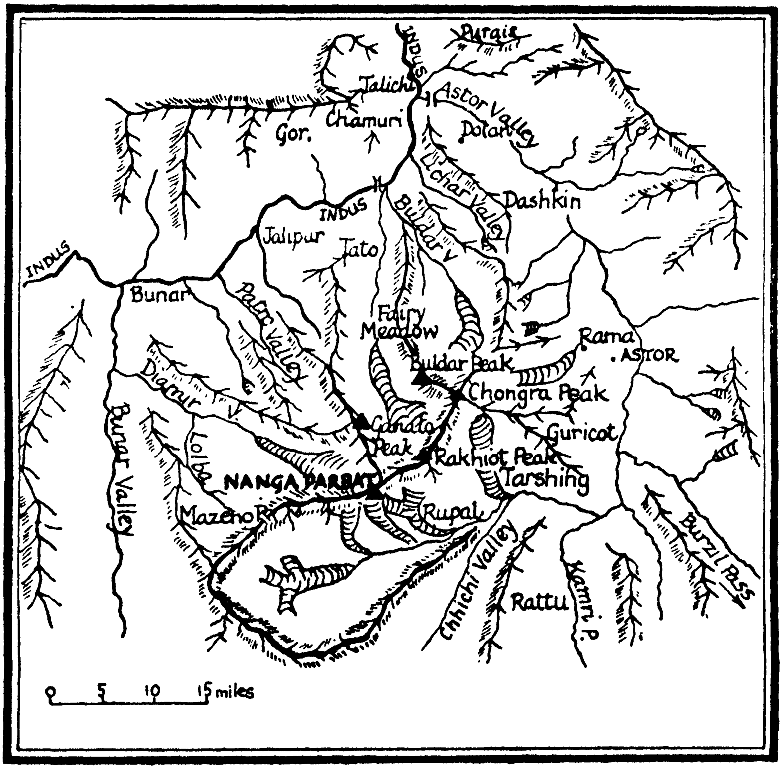
THE MOUNTAINEERING history of Nanga Parbat goes back to the very earliest days of Himalayan climbing, to 1895 when an ascent to the summit was attempted by one of Britain's greatest climbers—A. F. Mummery.

Mummery liked to climb without professional guides and to ferret out new ascent routes on the well-known peaks of the Alps. That his name is not as widely known as that of less illustrious Victorian climbers is due to the fact that he was much more a man of deeds than of words. He was no writer, and his only book, *My Climbs in the Alps and Caucasus*, was the outcome of hurried scribblings on the mountain made for the entertainment of his friends.

He was well into his forties when, in June, 1895, he set out for India to fulfil his life's ambition to climb one of the highest peaks of the world. In less than a month from his departure from England he was on his way through the legendary Vale of Kashmir to the South Wall of Nanga Parbat. He entered the narrow glacier-blocked Rupal valley and with his companions, Geoffrey Hastings and J. Norman Collie, gazed up from the foot of the immense rock wall with its hanging glaciers, ice-clad gullies and stupendous precipices rising a sheer 15,000 feet to the summit far above.

Mummery had not chosen the route to the South Wall for any technical reason. The mountain was practically unknown. The method of approach was dictated by political expediency.

To the west and north of the mountain lived the savage tribes of Chilas, against whom military operations were still being conducted. At that time, as to-day, the Gilgit Agency was of great strategic importance. Only four years previously, in 1891, the "Gilgit Road" had been constructed over the Burzil Pass to pacify the wild and notorious Hunzas (who were to become the best mountain porters locally available and were used in the expeditions of 1932 and 1953). Mummery, unlike the leaders of modern expeditions, had to live off the country, and he could not compete with the military who depleted the local resources around the Gilgit Road. The progress of the ascent had


Indus
Talichi
Chamuri
Gor.
Astor Valley
Doian
Lichar Valley
Dashkin
Indus
Jalipur
Tato
Buldar V.
Indus
Bunar
Patro Valley
Fairy Meadow
Buldar Peak
Rama
Astor
Chongra Peak
Diamir V.
Ganalo Peak
Guricot
Rakhiot Peak
Tarshing
Bunar Valley
Loiba
NANGA PARBAT
Mazeno P.
Rupal
Chichi Valley
Rattu
Kamri P.
Burzil Pass
0 5 10 15 miles

The Nanga Parbat Massif

repeatedly to be halted while the climbers themselves went on foraging expeditions. It was therefore necessary to remain as close as possible to the civilized part of Kashmir to the south of the mountain.

In spite of the awe-inspiring sight of the South Wall from the Rupal valley, the party was undismayed. They were too close to work out a route but they had a vague idea of climbing up to a pass to the west of the summit which they called Nanga Parbat Pass, and then traversing up the west ridge to the summit. This route seemed to lead first over a very steep buttress of rock and an enormous ice ridge which looked like "a very exaggerated copy of the Brenva route up Mont Blanc".

The party agreed that they would have to "push" camps with provisions up to the 20,000 feet high pass for the final assault; they were understandably uncertain and even apprehensive about the last 6,000 feet on the west main ridge.

They next embarked on a series of short climbs up the south side of the Rupal valley in the hope of getting a better view. They had at this stage of their expedition no porters as such, but were accompanied by a few sophisticated Kashmiri servants who were aghast when they found they were expected to climb interminable snow slopes and narrow ice gullies. When Mummery put them on the rope and to their growing alarm initiated them into the pleasures of rock-climbing they asserted that no respectable Kashmiri gentleman would ever attempt to climb in such unsuitable places. One can sympathize with them for some of the rock pitches of fifteen or twenty feet were almost perpendicular.

At 16,000 feet sahibs and servants alike began to feel the effects of the altitude and, although Mummery lightly regarded this as little more than a passing inconvenience, it was agreed that no serious ascent should be attempted until the party was better acclimatized. They accordingly decided to wander round the mountain's central massif to the western flank.

They now crossed the interminable screes of the Mazeno Pass, 18,000 feet high, at the western end of the Rupal valley. This kind of slow grind was extremely distasteful to Mummery. Collie was overcome by a severe attack of mountain sickness near the Pass and could hardly crawl to the top. After circumventing the western promontories they entered the narrow, deeply incised Diamir valley and came face to face with the great ice-fall breaking down over the Diamir west face. From their camp at 12,450 feet astride the glacier, Mummery quickly picked out the route by which he hoped to gain the upper snowfield immediately below the summit. But what of the gigantic ice-fall itself? Mummery pointed to three dark rock ribs dividing the ice-fall like a centre parting and forming an arrow head direct to the summit. After gaining the upper snowfield, Mummery intended to traverse to the left towards the North Summit and the Bazhin Gap and from there he might have followed the route to the summit up the east ridge and shoulder which Buhl actually chose in 1953.

The party had only a few days' food for this reconnaissance trip—a lack of foresight characteristic of Mummery's rush tactics—and were therefore obliged to retrace the route to their Base Camp in the Rupal valley. Typically, Mummery decided to by-pass the tedious boulder-strewn slopes of the Mazeno Pass and to strike across the South Wall itself to the Pass or the head of the Rupal valley. In view of the slenderness of his reserves this was an audacious plan. Carrying lanterns, they set out before midnight, making for a rib of rock which pointed to a gap in the wall to the south of the Diamir valley. This they reached at dawn, but now, for the first time, they experienced the vast scale of Himalayan climbing. Point after point within the rib had to be surmounted and the gap still remained high above them. Eventually the rib was found to lead to a peak which soared to the west of the Pass. Mummery now decided to strike out in a bold traverse across the avalanche-threatened snow slopes several thousands of feet high. Two ropes were tied together, the climbers spread themselves out as far apart as possible, and so made their intrepid crossing. At 2 p.m. they reached the 18,000 feet high gap which they named the Diamirai Pass. Mummery was delighted with the varied techniques which the ascent had made necessary, but a severe disappointment awaited him at this late hour. They were still on the wrong side of the range with a small glacier (the Lubar or Loiba) below them and the Mazeno Pass far on the other side. Their Base Camp, nearest source of replenishment, was about twenty miles beyond the Mazeno Pass. Their situation was grim indeed. There was nothing for it but to descend several thousand feet to the Lubar glacier. In the gathering darkness, twenty hours after their start, they had to crawl up and down again across the despised screes of the Mazeno Pass, a terrible night of stumbling, slipping and falling. Only the knowledge that they must go on at any price kept them moving.

They reached their base in the afternoon of the following day. General Bruce, then a young major in the Indian Army, had obtained a month's leave and was there to join them. They celebrated the occasion by drinking their priceless store of Bass's Pale Ale to the last bottle. Bruce was to become one of the most distinguished figures in Himalayan climbing, and leader of a later Mount Everest Expedition. He had brought for Mummery two Gurkhas from the Indian Army, Ragobir and Goman Singh. Bruce had not at that time discovered the prowess of the Sherpa porters (for whose training he was chiefly responsible), but his preliminary choice of the Gurkhas was a most fortunate one. Ragobir and Goman Singh proved to be excellent porters and loyal servants.

July was nearly over and the augmented party started off for unambitious practice climbs to break in the Gurkha porters. Then Mummery decided to return to the Diamir West Flank. Incorrigible, he again shied away from the laborious roundabout trek across the Mazeno Pass and once more set out to strike direct across the western part of the South Wall to the head of the Diamir valley. His party camped near the Mazeno Pass at a height of 13,000 feet and set off before dawn. By five o'clock in the afternoon they had climbed over 7,000 feet without a break. They ate their evening meal in a state of exhaustion and with the certain prospect of a bivouac in the open. Bruce, Collie and Ragobir decided to return to a "less exalted position", but Mummery and Hastings would not give in so early. Intrepidly they went on through the evening mists and reached a height of 21,000 feet quite near the summit of Mazeno Peak. They hoped to continue their ascent by the light of the full moon, but as after sundown the mist had not lifted they had to beat a laborious retreat. They rejoined the rest of the party as the new day was breaking. Characteristically, they had now run out of supplies again, and there followed another day of agony in search of shelter and food. Ragobir kept collapsing on the long crawl down to the Mazeno Pass and it came to light that he had also passed the whole of the previous day without eating. It was, indeed, Ragobir's vagueness about his own food that later caused Mummery to break off his last bid for the summit. At sunset they reached some shepherds' huts at Lubar where they refreshed themselves in a manner far removed from that of the civilized tinned fare of later expeditions. This is how Collie describes that evening which, he said, provided him with one of the keenest enjoyments of his life:

"I shall never forget the sight that greeted my eyes when Mummery and I, the last of the party, walked into the small enclosure of stones where the goats and sheep were collected.

"Bruce was seated on the small wall in his shirtsleeves, superintending the slaughter of one of the sheep. And, horrible to relate, in less than half an hour after we entered Lubar we were all ravenously devouring pieces of sheep's liver only half cooked on the ends of sticks.

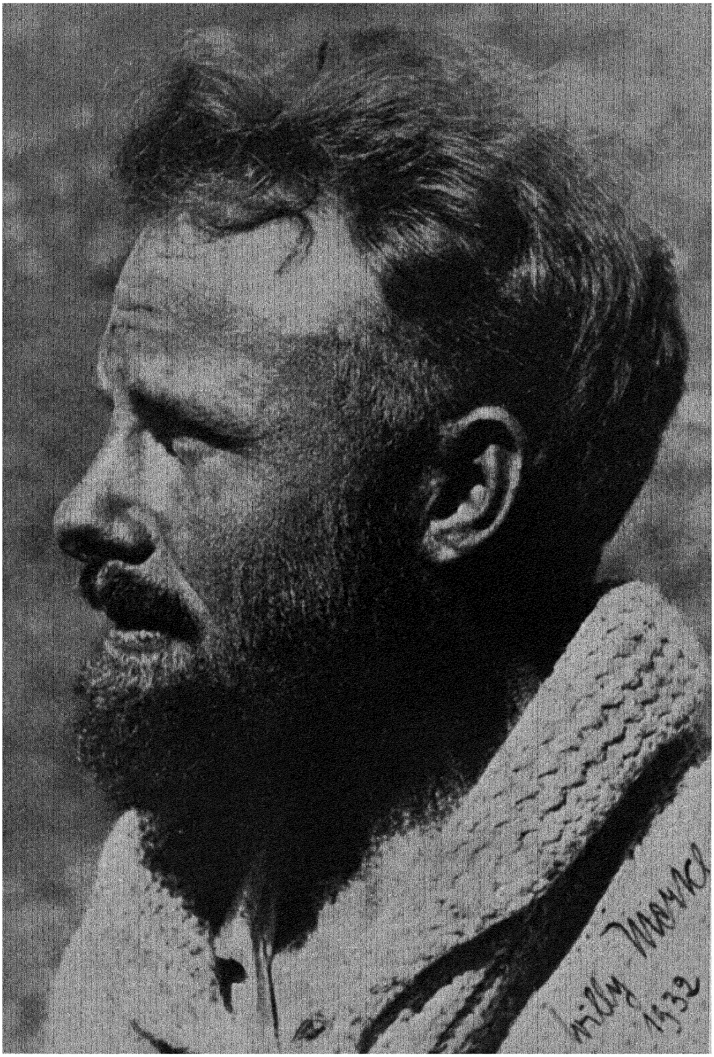
"The dirty, sour goats' milk, too, was delicious, and as far as I can recollect, each of us drank considerably over a gallon that evening, to wash down the fragments of toasted sheep and chapatis that we made from some flour that had providentially remained behind our caravan with a sick coolie. Very soon we got into a somewhat comatose condition, and there was some sort of arrangement made, that should any one wake in the night he should look after the fire. But next morning when I awoke the fire was out and I was covered with hoar frost. We had all fallen asleep almost in the positions in which we sat in front of the fire."

They were none the worse for their experience.

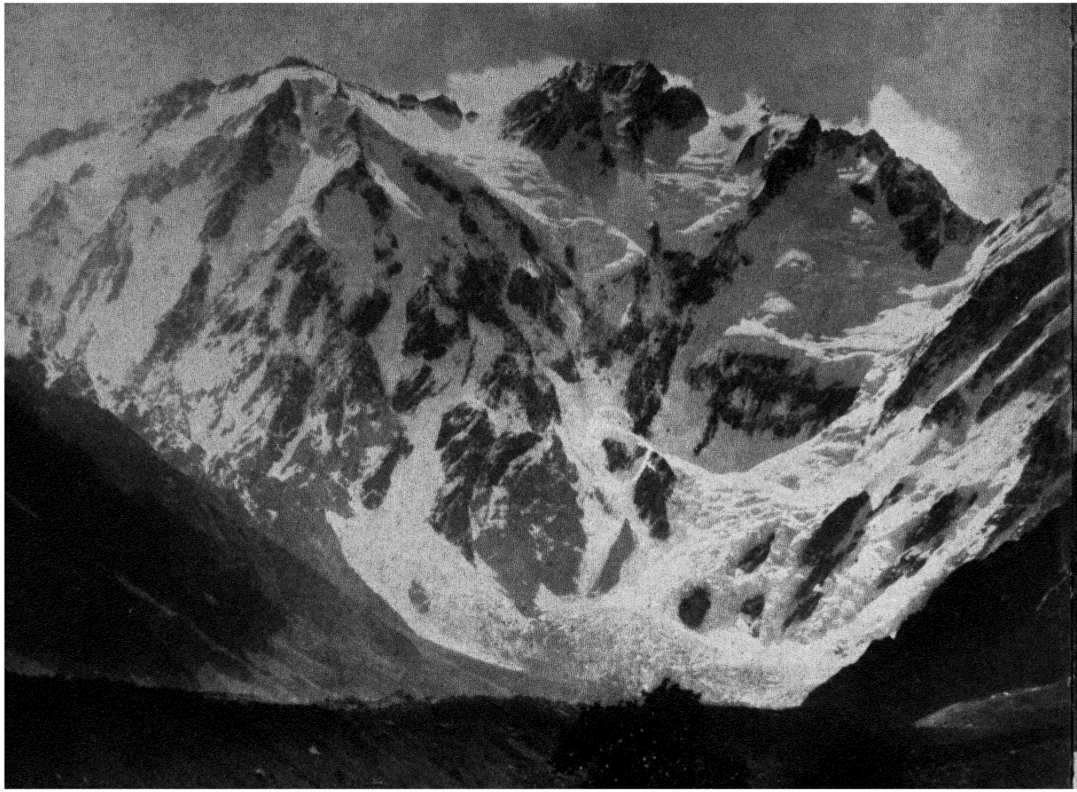
Arrived in the Diamir valley, Mummery at once set about preparing his famous assault. Bruce was now ill with mumps (for many months afterwards he was unable to wear a collar) and his leave from the army was over; provisions were once more running low and Hastings volunteered to go to Astor to bring up fresh supplies. Collie was having increasing doubts about the effects of high altitude above 21,000 feet. He records: "I quoted an article I had read somewhere about paralysis and derangement of nerve-centres in the spinal column being the fate of all who insist on energetic action when the barometer stands at thirteen inches. It was no good, Mummery only laughed at me." But it is significant that while Mummery appeared confident and light-hearted to his companions, he confessed in a letter to his wife: "I begin to have some doubts about our ultimate success."

Mummery intended to push up camps along the three central ribs of the Diamir Ice-fall; after gaining the upper snowfield a final camp was to be established at the very foot of the summit massif at about 22,000 feet. On 6th August, 1895, he climbed with Ragobir to the second rib of the ridge and set up his first camp at 17,000-18,000 feet. It was here that Lobenhoffer and Chicken, members of the Reconnaissance Expedition of 1939, found a single log of wood, pathetic relic of the famous first attempt. With gigantic avalanches of ice plunging down to the left and right it had lain there undisturbed for almost half a century. Meanwhile Lor Khan, a huntsman from Chilas, had attached himself to the party and on 11th August climbed with Mummery, Collie, Ragobir and Goman Singh to a height of 19,000 feet. Of this ascent Collie wrote:

"Lor Khan, who came behind me on the rope, seemed to be enjoying himself immensely; of course he had never been in such a position before, but these Chilas tribesmen are famous fellows. What Swiss peasant, whilst making his first trial of the big snow peaks and the ice, would have dared to follow in such a place, and that, too, with only skins soaked through by the melting snow wrapped round his feet? Lor Khan never hesitated for a moment; when I turned and pointed downwards he only grinned, and looked as if he were in the habit of walking on ice slopes every day of his life. We were soon all in a line across this ice face, and whilst I was cutting one of Mummery's steps deeper to make it safer for our Chilas shikari, I noticed that the rope was hanging down in a great loop between Lor Khan and myself. At once I cried out to him not to move again till it was

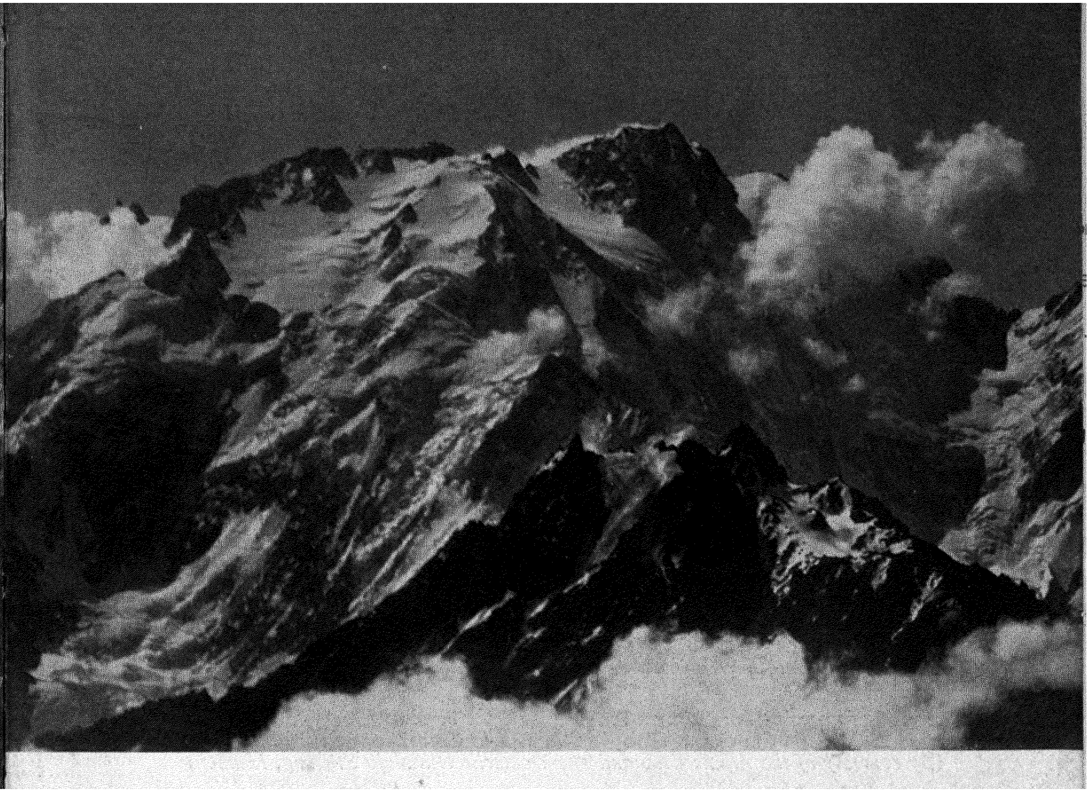

Willy Merkl
1932

Willy Merkl

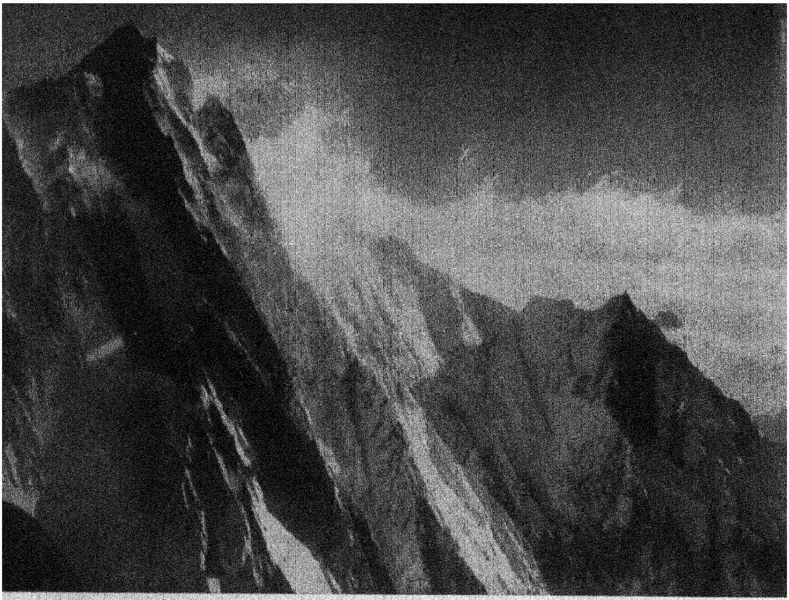

North Summit
Bazhin Gap
Main Summit
(below: Diamir ice fall)

The Diamir face of Nanga Parbat

Historical photograph by Hastings, Mummery's companion (*by courtesy of the Alpine Club*). The three ' ribs ' of the Mummery route are below the Main Summit. The left elevation on the summit crest is the ' Shoulder '

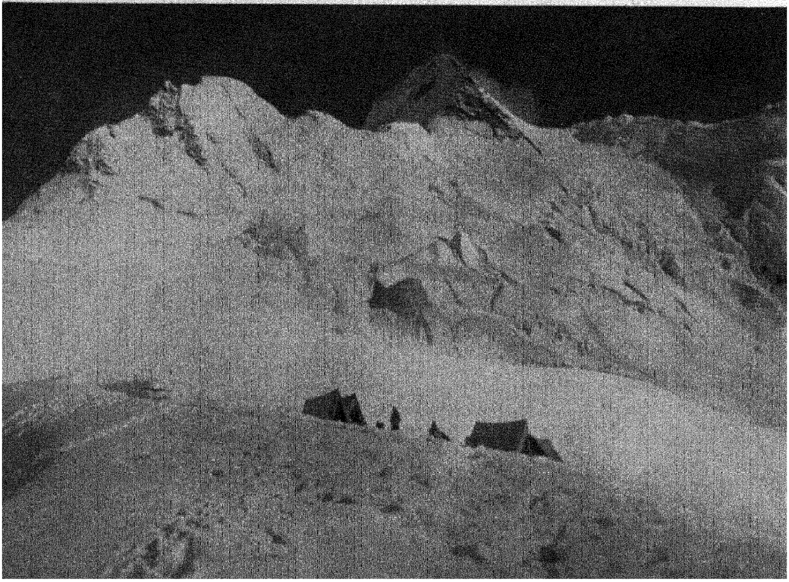


Profile of the Diamir face of Nanga Parbat, showing the extreme steepness of the Mummery route (below cloud). To the right of the centre is the summit structure, to the left of it the two north summits. The north-north-west ridge (in the centre) points towards the photographer



The southern precipices of Nanga Parbat. Rakhiot Peak to the right, South-East Summit in cloud, Camp V (1953) near depression in ridge
(By courtesy of the Alpine Club and The Deutsche Himalaja Stiftung, Munich)

The route to Camp IV towards Rakhiot Peak and East Arête of Nanga Parbat. Camp III (old Camp IV) in the foreground
(By courtesy of Monsieur Marcel Kurz)



absolutely tight between us, and always to keep it so for the future. In the East we found that people were accustomed to obey instantly without asking questions. What the sahib said was law, at least so long as the sahib was there himself to enforce obedience. Consequently as I moved onward the rope soon became taut, and fortunately remained in that condition. Shortly after this Mummery turned upwards and slightly to his right, cutting nearly straight up the face, owing to some bad snow which barred our way. Just as I began the ascent of this staircase I heard a startled exclamation below. Instinctively I struck the pick of my axe deep into the ice, and at the same moment the whole of the weight of the unfortunate Lor Khan came on Ragobir and on me with the full force of a drop of some five to six feet. He had slipped out of one of the steps, and hung with his face to the glistening ice, whilst under him the thin coating of snow peeled off the face of the slope in great and ever-widening masses, gathering in volume as it plunged headlong down the mountain-side, finally to disappear over the cliffs thousands of feet below. For the time being I was fascinated by the descending avalanche, my whole mind being occupied with but this one thought, that if Lor Khan began to struggle and jerk at the rope I should without a doubt be pulled out of my steps. My fears proved groundless. Although Lor Khan had lost his footing he never lost either his head or his axe, and was just able to reach with his hand one of the steps out of which he had fallen. After Mummery had made himself quite firm above me I found myself, with the help of Ragobir, who was last on the rope, just able to haul up our Chilas shikari to a step which he had manfully cut for himself."

And of the descent to Base Camp:

"Ragobir was sent to the front. He led us down the most precipitous places with tremendous rapidity and immense enjoyment. It was all 'good' according to him, and his cheery face down below made me feel that there could be no difficulty, till I found myself hanging down a slab of rock with but the barest of handholds, or came to a bulging mass of ice overhanging a steep gully, which insisted on protruding into the middle of my stomach, with direful result to my state of equilibrium.

"At one place where the ridge was a narrow knife edge, with precipices on both sides, we had a splendid piece of climbing. A sharp descent of about a hundred feet occurred on the arête which seemed at first sight impossible. Ragobir tried first on the right hand, but, owing to the smoothness of the rock slabs and the absence of all handholds, was unable to get down further than twenty feet or so. Whilst I was dangling the Gurkha on the end of the rope, Mummery discovered what he considered to be a possible solution of the difficulty. Ragobir was to climb about twenty-five feet down a small open chimney on the perpendicular south face of the ridge; he would then be on the top of a narrow flake of rock which was laid against the mountain-side in the same manner as those on the traverse of the Aiguille de Grépon. We could easily hold him from above whilst he edged sideways along this narrow way. After a short time he called out that it was all right, and I let down Lor Khan next. When I myself got on to the traverse I was very much impressed, not that it was very difficult, thanks to the splendid handholds, but the face was so perpendicular that without them one could hardly have stood on the narrow top of the slab without falling outwards. A loose stone when thrown out about twenty feet pitched on some snow at least five hundred feet below."

In spite of continuing bad weather Mummery decided to push another camp up the third rib prior to his final assault on the summit. This involved sleeping in the already existing intermediate camp on top of the second rib. Mummery, Ragobir and Lor Khan spent the night here and the next day in dense mist climbed another thousand feet up the third rib where they left a rucksack with food. Mummery intended to strike out later from this point carrying a light silk tent of his own invention for his final bid for the summit. But the camp on the third rib had first to be consolidated and Mummery set out to return to Base Camp before sunset. He arrived late at night and wet through and was greeted by the anxiously waiting Collie. Mummery was in excellent spirits and gave a glowing account of his experiences. Avalanches which would have swept away whole towns had fallen right and left. The crevasses were enormous, and the rock-climbing was at such an angle that no time would be lost in making height towards the upper snowfield below the summit itself. If only the weather would clear he was sure he could get at least to that upper glacier.

Of the night that followed Collie wrote: "About midnight, gusts of cold wind began to moan amongst the stunted pines that surrounded our tents; then, gathering in force, this demon of the mountains howled round our tents, and snow came down in driven sheets. The anger of the spirits that inhabited the mountains had been roused, and we were being informed of what awaited us, should we persist in our impious endeavours to penetrate into the sanctuaries above.

"Many times in the pitch darkness of the night I thought the small 'Mummery tent' I was in would be simply torn in pieces, but towards daylight the hurricane gradually died away, and by nine o'clock the sun came out. The scene, when I emerged from the tent, I shall never forget. Bright sunshine and dazzling white snow—but where were all the groves of rhododendron bushes, from four to five feet high, that yesterday had surrounded our camp? Loaded with the snow, they had been beaten flat, and lay there plastered and stuck tight to the ground, by the ice and snow of the blizzard of the night before."

Mummery was now anxious to make his final assault on the summit without delay. He had some scruples about setting off without waiting for Hastings to return from his foraging expedition but after long deliberation he and Collie decided that the opportunity should not be allowed to pass. Collie, his digestion upset by the coarse food of the past weeks, accompanied Mummery and Ragobir only as far as the camp at the head of the glacier where he spent the night, returning then to Base Camp. On the following day Hastings arrived back in Base Camp with large quantities of provisions.

Mummery and Ragobir spent the second night in the first camp on top of the second rib and, starting before dawn as was Mummery's habit, pushed up on the final rib towards the upper snowfield. The climbing, Mummery admitted later, was excessively difficult, but the higher he climbed the easier it appeared. At last at a height of over 20,000 feet he could see over the

Nanga Parbat Pass to the right of the summit. Then Ragobir fell suddenly ill. It turned out that he had again failed to eat properly and was weakened by hunger. It was impossible to spend another night at that altitude and Mummery, himself in excellent form, had to break off his last decisive assault. His disappointment was great as at this point all technical difficulties had been overcome. He felt convinced that if he could have spent another night on the upper snowfield he would have reached the summit on the following day. So ended the assault on the summit by what has since become known as the Mummery Route.

To-day, in the light of fuller experience of Himalayan climbing, it is not unusual to hear Mummery's plan dismissed as utterly impracticable. It is known now that in the assault of a 26,000 feet peak the really exacting work begins only after a height of 20,000 feet has been reached, and that for the last 6,000 feet at least three and probably four or five further camps must be established with an efficient transport organization behind them.

Buhl's lone dash for the summit in 1953 is more akin to Mummery's attempt than to any of the highly organized expeditions which were launched during the sixty years between. Buhl too set out with a minimum of food and equipment and shed even his rucksack when he was still far away from the summit. His starting point was, perhaps, a little higher than Mummery's projected last camp, but in distance it was many times further away. He was thus obliged to spend longer in the critical zone above 21,000 feet than Mummery would have been. Established Himalayan practice suggested that at least one or two further camps were necessary, even indispensable. And yet Buhl succeeded. Should one, therefore, dismiss Mummery's single-handed bid as utterly impracticable? As his achievement stands it still represents in the words of General Bruce "the most exacting mountaineering that has ever been done in the Himalayas".

After abandoning his assault from the Diamir West Flank, Mummery decided to tackle the mountain from the last remaining flank yet to be explored, the North-East Flank falling off to the Rakhiot valley, the route, indeed, by which all subsequent expeditions fought their way up the mountain. Mummery was as usual reluctant to walk round the mountain across uninteresting low passes and once again set off with his two Gurkhas to strike direct across one of the Diama Gaps to the Rakhiot valley behind. Collie and Hastings took the rest of the party round three low passes.

When Collie reached the top of the last pass above the Rakhiot valley he could see the profile of the great North-East Flank down which Mummery and his two Gurkhas would have had to come had they reached the Diama Gaps. It looked quite hopeless and a close examination of the most feasible looking ridge through a powerful telescope failed to reveal any evidence that Mummery and his companions had passed that way. He and Hastings therefore conjectured that Mummery must have turned back; Mummery had, in fact, said he would do just this if the Pass should prove too dangerous, and he had left caches at the upper camp to tide him over a possible return journey until he caught up with the others. Accordingly his friends sent two porters back with extra food to meet him. After three days they returned with the report that they had seen no trace of Mummery and his two Gurkhas.

Had he missed the way in the mist of the past few days or had he perhaps suffered a minor injury which had kept him back in the Diamir valley? Hastings returned immediately to the Diamir valley. Collie had to go on as his leave was nearly over, but he agreed to wait at Astor for further news. On 5th September he received a telegram from Hastings to the effect that still no trace of Mummery had been found. The camp was untouched and even the caches higher up were exactly as they were when Mummery had set out on the morning of 24th August. There was only one possible explanation—Mummery and his Gurkhas had perished higher up on the Diama glacier, caught, no doubt, in one of the many ice avalanches which thunder down the Diamir face. Collie wrote: "It was a dreadful ending to our expedition. The mountains amongst which we had spent so many pleasant days together no longer were the same. The sunshine and the beauty were gone; savage, cruel and inhospitable the black pinnacles of the ridges and the overhanging glaciers of cold ice filled my mind with only one thought."

Though all hope was now at an end, Collie went back and rejoined Hastings. His state of mind as he returned to the Diamir valley is reflected in his impressions of the country through which he passed: "The dominant sensation in this strange land is that of fear and abhorrence; and what makes it all the more appalling is that this thing before one is there in all its nakedness; it has no reserve, there is nothing hidden. Its rugged insolence, its brutal savagery, and its utter disregard of all the puny efforts of man, crushes out of the mind any idea that this spot belongs to an ordinary world.

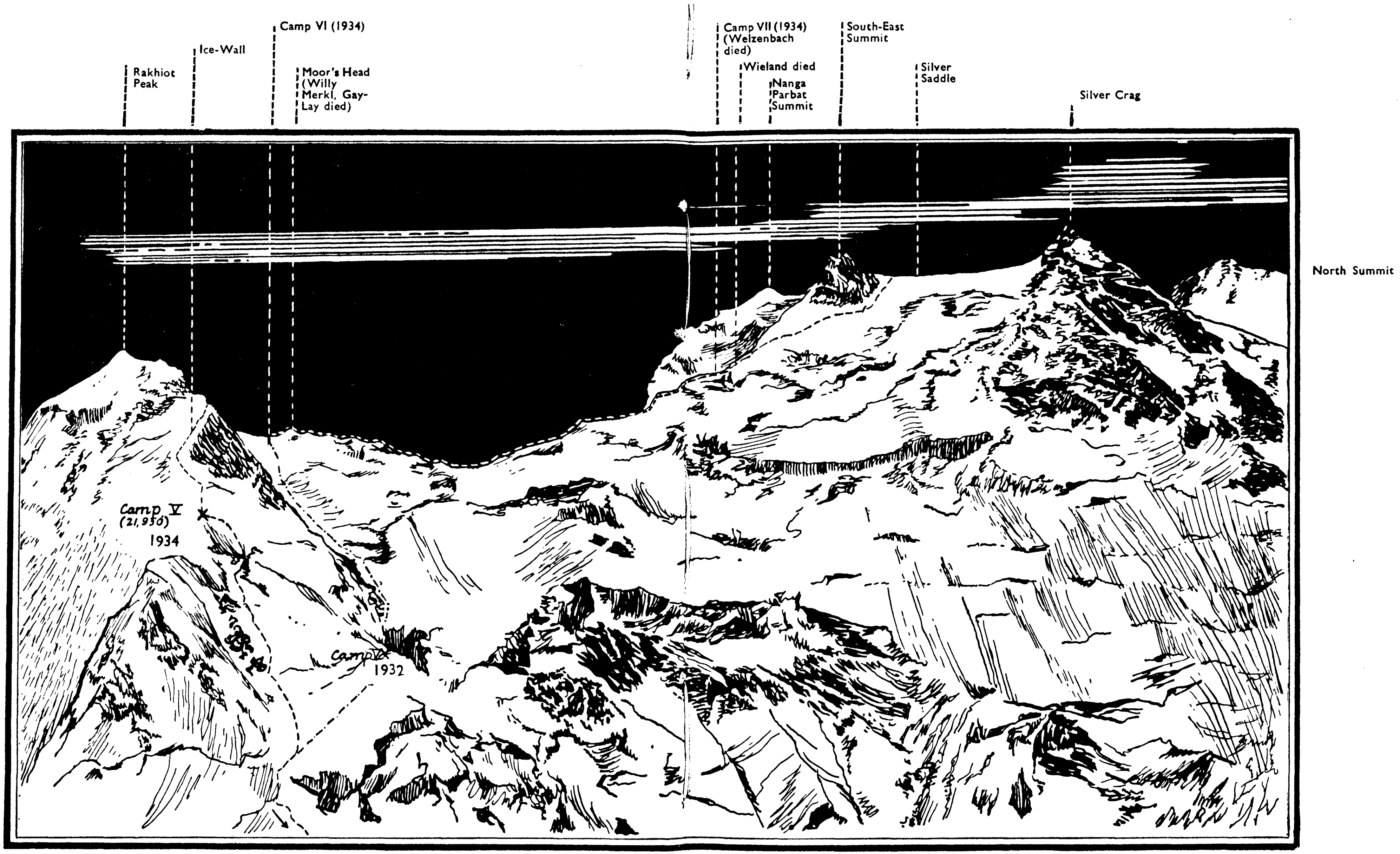
"Whether in the day or the night it is the same. During the stifling hours of noon the (Indus) valley sleeps in the scorching sunlight, but there, always there, is that monstrous flood below, slowly, ceaselessly moving. Occasionally the waters will send up an angry and deep-tongued murmur, when some huge eddy, rising to the surface, breaks, and belches out the waters that have come from the lowest depths.

"At night in the stillness and the heat, as one lies unable to sleep, imagination runs riot; from out the inky shadows that seam the hill-sides in the pale moonlight, dragons and great creeping monsters seemingly appear crawling slowly down to drink at the ebon flood beneath. And imagination easily in restless dreams becomes reality, thus adding tenfold to the already accumulated horrors."

When the two friends arrived at the deserted camp in the Diamir valley, winter had already set in and a search in the higher glacier regions had become impossible. In the deep powdery snow the friends waded up as far as they could with avalanches coming down in continuous succession. Somewhere in these colossal wastes of snow and ice Mummery and his companions lay buried. "The avalanches were thundering down the face of Nanga Parbat, filling the air with their dust; and if nothing else had made it impossible to penetrate into the fastnesses of this cold, cheerless, and snow-covered mountain-land, they at least spoke with no uncertain voice, and bade us be gone. Slowly we descended, and for the last time looked on the great mountain and the white snows where in some unknown spot our friends lay buried." Thus Collie's sad farewell to Nanga Parbat.

The mystery surrounding Mummery's disappearance aroused as much speculation at the time as did the passing of Mallory and Irvine on Mount Everest in 1924.

The story of Mummery's probings of the more direct routes up the immense South Wall and the ice-fall of the Diamir West Flank explains why subsequent expeditions approached the mountain by its back door, toiling up the many tiers of the wild avalanche-swept Rakhiot glacier to gain a foothold on the East Arête still only 22,000 feet high and miles away from the summit. But for a long time no expedition went out to Nanga Parbat. General Bruce publicly expressed his own doubt whether the peak would ever be climbed.


Rakhiot Peak
Ice-Wall
Camp VI (1934)
Moor's Head (Willy Merkl, Gay-Lay died)
Camp VII (1934) (Welzenbach died)
Wieland died
Nanga Parbat Summit
South-East Summit
Silver Saddle
Silver Crag
North Summit
Camp V (21,950) 1934
Camp IV 1932

Alternative Routes across the Rakhiot Ice-Wall or Mulde of the 1932 and 1934 Expeditions

------------ *1934 Route*

— —·—·—·— *1932 Route*

CHAPTER III

The German-American Expedition of 1932

THIRTY-FIVE YEARS passed before Mummery's plan was again examined and in 1930 Dr. Willo Welzenbach gave thought to the possibility of a German ascent of Nanga Parbat. Illness and professional duties prevented him from carrying his plan to fruition and when his friend Willy Merkl, to whom Mummery was a heroic figure, took over the idea, insuperable obstacles seemed still to bar the way. But Merkl refused to be beaten by them and by dint of sheer determination and the ready help of supporters, the German-American expedition of 1932 took shape with Willy Merkl as leader. It was Merkl's first time in the Himalaya.

His companions on the first expedition he was to lead were young Peter Aschenbrenner, an Austrian mountain guide from Kufstein in the Tyrol (who reappeared as a veteran in the expedition of 1953), Fritz Bechtold, Merkl's intimate friend, Dr. Hugo Hamberger, physician to the expedition, Herbert Kunigk, a handsome giant of twenty-four and the "baby" of the party, Felix Simon, a veteran mountaineer of over forty, and Fritz Wiessner who later became a naturalized American and was to lead the American Karakoram Expedition in 1939. The American element was represented by young Rand Herron of New York and Elizabeth Knowlton, who accompanied the expedition as press reporter. Herron's climbing record was impressive. He had started on rock, climbing guideless, with such fabulous feats as leading the Vajolet Towers in the Dolomites, twice in one day, in his second climbing season. He had specialized in the more difficult and out-of-the-way rock climbs, wandering over the mountain ranges of Europe from Olympus to the Pyrenees, and making many first ascents, often alone. He had also had good experience in snow and ice, on many of the famous routes in the Mont Blanc massif, and in expeditions to Morocco, the High Atlas, Lapland in winter, and the Caucasus, where with three friends, he was first to conquer the famous and frequently attempted peak, Guilchi (14,680 feet). Among his German and Austrian companions, mostly short, square, stolid men, he stood out, long-legged, black-headed and alight with eagerness. Merkl said of him: "He was the ideal man for a great expedition; always of even-tempered serenity, kindly and forbearing, sharing everything with everyone. Himself lovable, he brought out the best in others. His unfailing optimism and great driving force sprang not so much from a desire for sporting accomplishment as from a deep love of the mountains." It was Herron's personality, and not so much American financial support, which gave the expedition its international title. The project was financed mainly by German and Austrian Alpine Clubs, and by its own members, and its resources were relatively meagre. This may have been the reason why the expedition failed to hire seasoned Sherpa porters from Darjeeling, and made do with locally hired Hunza tribesmen.

In the middle of May the party arrived in Srinagar, the capital of Kashmir, where they had to obtain permission to enter the Chilas district to the north of the mountain. After a period of waiting they were granted permission to approach Nanga Parbat but from the south side, i.e., by the immense South Wall which Mummery had probed in vain. As a way out of this impasse, Herron hit on the idea of suggesting to the government that the expedition should, while in the Chilas region, keep high on the shoulders of the Nanga Parbat massif and not pass through any villages. This meant that they had to cross three wild trackless ridges in order to descend into the Rakhiot valley.

From Srinagar they had to cover a distance of close on two hundred miles, mainly along the "Gilgit Road" which took them over the still snow-covered Tragbal and Burzil Passes.

The porters had to carry their loads over the Burzil Pass by night as, at that early season, daytime snow conditions would have made their task impossible. For the rest, 110 ponies carried the expedition's luggage to Astor to the east of Nanga Parbat. There, in accordance with a local custom which was rigidly enforced, the coolies of Srinagar insisted on being discharged. Lieutenant Frier of the Gilgit Scouts now joined the party as its transport officer and organized a new army of 150 load-carriers, and the Mir of Hunza, the autocratic ruler of the sturdy and independent mountain tribe, sent volunteers to undertake transport to the higher camps. Hopes were entertained that the Hunzas would develop into fine porters like the Sherpas, but neither on the 1932 expedition nor on the victorious expedition of 1953, which had to fall back on the expedient of training Hunzas for high altitude work, were they able to accomplish all that the German climbers expected of them. Of the hordes of Kashmiri porters only one man remained, and he had to defy intimidations and threats from his fellows to do so. His name was Ramona and he was to become famous as the "Nanga Parbat Cook" on this and later expeditions. Those who know from experience the effect that food has on morale, particularly in the high camps, will appreciate the importance of the contribution he was able to make.

Aschenbrenner and Bechtold set out as scouts to find a route across the three mountain ridges which lay before the Rakhiot valley, but they failed to find a shorter route up the first two valleys and there was no alternative but to lead the endless columns of porters up and down the three ridges. When at length the Rakhiot valley was reached, the loads were dumped near a beautiful clearing which had Nanga Parbat's stupendous north-east wall as its magnificent background. This "Fairy Meadow" as Merkl called it was to become famous throughout the mountaineering world and all subsequent expeditions assembled near this beauty spot in their interim or provisional Base Camps.

When the loads were checked it came to light that nearly all the bags containing the porters' equipment for the high camps had been stolen. First illusions about the local porters had already been dispelled. At the outset they had appeared cheerful and willing, and Merkl considered himself fortunate in having such material. Then they had become moody and unreliable, refusing to carry heavy loads and liable to complain of minor ailments. Now a grave suspicion of wholesale theft fell upon them. The climbers collected together what odd items of equipment they could and the result produced just about enough to set up nine porters. This was a set-back of the first magnitude.

On 24th June, six weeks after arrival in Srinagar, the interim Base Camp was consolidated. Two routes to the summit were considered. The first possibility was to force the steep ice-clad North-East Flank and to climb along its north-north-west ridge towards the North Summit and the main summit beyond. This would have meant climbing a sheer wall up to the Diama Gaps in the reverse direction to which Mummery had attempted to cross over to the Rakhiot valley on his last trip. It was eventually decided that the wall was too formidable a proposition and in any case could not be climbed by porters.

The second possibility was that the Rakhiot glacier, with its many tiers of steep ice-falls and deeply crevassed terraces, could serve as a ramp to gain the main east ridge joining the Chongra Peaks at the left and the Rakhiot Peak at the head of the valley with the vast Silver Plateau to the right, which was part of the main massif.

The expedition decided to embark on this latter plan. They had first seen the smoothly rising *Firn* plateau from far away while still approaching through the Rakhiot valley. How the route continued beyond the plateau to the summit proper they could only guess. The immediate obstacle to be overcome in embarking on the many tiers of the Rakhiot glacier was the Great Ice-fall, 3,000 feet high, which barred the way to the first terrace.

At this point, and before anything could be attempted, the porters went on strike. This was the first of many such strikes which were to bedevil the sorely-tried expedition, in spite of all Lieutenant Frier's efforts to maintain discipline. It was at first mainly a question of food as the customary chapati cakes had run out and had to be replaced for the time being by sahib rations of rice. Excited speeches were made with much oratory and gesticulation none of which was understood by the climbers, but so much became clear—they wanted more of everything. The flour for making the chapatis was on the way and in the end the strike petered out. The next action of the porters was to complain about having to take turns with the same clothes. Since this was made necessary only because of the thefts, the complaint was a fine piece of brazen effrontery. However, the porters announced briefly that they were about to depart for good and the helpless climbers watched one man after the other pick up his things and move off down the valley. Frier tried to comfort his comrades with the hope that their tribal chiefs would send them back and with the certain knowledge that they had not got enough food to see them home. As it happened the porters showed up again the next day and kept the peace at least for a week.

On 24th June Herron and Kunigk started out to reconnoitre the route to the site for a permanent Base Camp as near as possible to the foot of the wildly torn Great Ice-fall dropping from the first tier of the glacier. Their task was to keep the track safely outside the reach of the many avalanches which thundered constantly down the North-East Flank. By keeping left near the Great Moraine of the Rakhiot glacier they made their way over glacial torrents and screes. At last from the top of the moraine they saw at its foot a charming little meadow with a brook running through it and protected on both sides by moraine walls from the hazards of the wild ice world around it, the ideal site for the permanent Base Camp. They pitched their tent, sent back the porters with the message that the site had been found and that the interim Base Camp should be moved up as soon as possible.

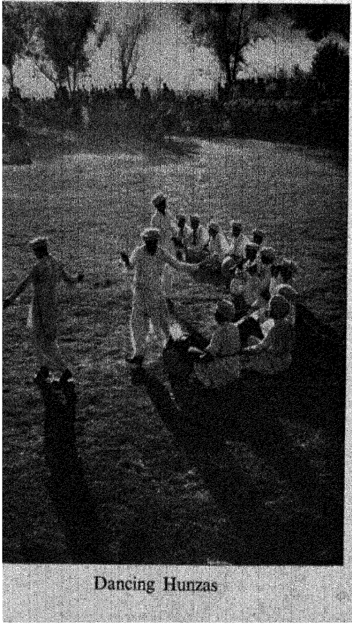
At about six the next morning Herron and Kunigk went on. After following the rocks for a while they set foot on a Himalayan glacier for the first time. As the sun rose gigantic Himalayan avalanches began to hurtle down the shutes from the North-East Flank uncomfortably close. At the end of the rocks they had reached a height of roughly 13,000 feet; it was only 1 o'clock. Looking up the gigantic ice-fall now soaring immediately before them they still hoped to force a way through on the same day. As they went on they realized how easily the European climber underestimates distances in the large-scale mountain world of the Himalaya. The merciless sun softened the snow and they sank deeper and deeper with every step. It also dried the thin air and made it difficult for them to breathe. Their movements became wearier and wearier. As they could not return the same day, they pitched their tent on a fairly flat platform immediately before the steep part of the ice-fall but far enough from the North-East Flank—so they thought—to be safe from its avalanches. This site was to be Camp I. They had not expected to bivouac and had only dry biscuits with them and milk powder which they ate straight from the tin in large quantities, and which, naturally, upset their stomachs. As long as the sun shone they were able to melt snow by means of the heat inside the tent combined with the warmth of their bodies. After sundown it was impossible to get water in this primitive fashion. Still feeling fairly sick, they got started very early next morning so as to enter the ice-fall while the snow was still hard. They could give little thought to the wild beauty around them, desperate as they were to find some way up, never knowing whether the next turn round a *sérac* or crevasse would not bring them up against some impossible obstacle. When they had nearly gained their objective, they found themselves cut off by an enormous crevasse spanned only by a narrow snow bridge to a sheer overhanging ice-wall opposite. Could a route be laid there which would be possible for convoys of porters? There was absolutely no alternative to the left. Herron hoisted himself on to Kunigk's shoulders and forced an ice chimney to search further right. But no continuation was found. So the snow bridge just had to do. The two men walked gingerly across and climbed the ice-wall beyond. In spite of all misgivings this snow bridge held out for the better part of the summer. Near exhaustion the half-sick men went only far enough to make sure that the first tier of the glacier could indeed be reached from there onwards. Then, summoning their last reserves of strength, they turned back. At the foot of the ice-fall they ran into a party led by Wiessner who had set out in their wake with the purpose of establishing Camp I near the site chosen by Herron and Kunigk.

Wiessner commented afterwards that he had never seen men more completely exhausted. They dropped into their sleeping-bags and lay motionless, allowing the porters to undress and massage them. Wiessner and Simon, following Herron and Kunigk's trail, quickly established Camp I at the foot of the Great Ice-fall and Camp II at its top.

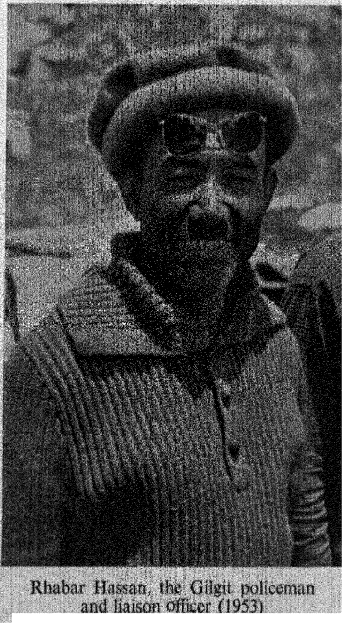
On 29th June Wiessner, this time in Aschenbrenner's company, took another convoy from Base Camp to Camp II. Passing the night in Camp I, they were awakened by a terrifying roar which sounded to them in their dazed state like an express train coming towards them with uncanny rapidity. With deafening thunder it seemed to rush right on top of them. The tent poles snapped like matchwood and the tent collapsed. Prostrate the men waited. The roar subsided and was gradually replaced by a deathly silence. As the climbers crawled from underneath the flattened tent, they felt themselves grasped by trembling hands and were assailed by anxious voices. The porters were beside themselves with fear. Their tent too had collapsed. Chaos reigned in the total darkness.

As day broke it appeared that an avalanche of enormous dimensions had come down the North-East Flank; the air pressure and snow dust driven by the edge of this avalanche had been sufficient to break the tent poles. The place where Herron and Kunigk had bivouacked a few days before lay directly in its course. The site chosen by Wiessner and Aschenbrenner had been sheltered somewhat by the ice-wall above; otherwise their tent would have been blown off its shelf. The frightened porters did not settle down again during the night but passed it with prayers to the goddess of Nanga Parbat. The fate of the two Gurkha porters who had perished with Mummery forty years before was still well remembered. When morning came they decided to leave the expedition for good. For two full days Frier tried to persuade them to remain. As nothing else promised success Frier kept offering them higher and higher wages until the amount had risen to five times the sum originally agreed on. Fortunately this was the last strike on the mountain, though porter troubles beset the expedition to its very end.

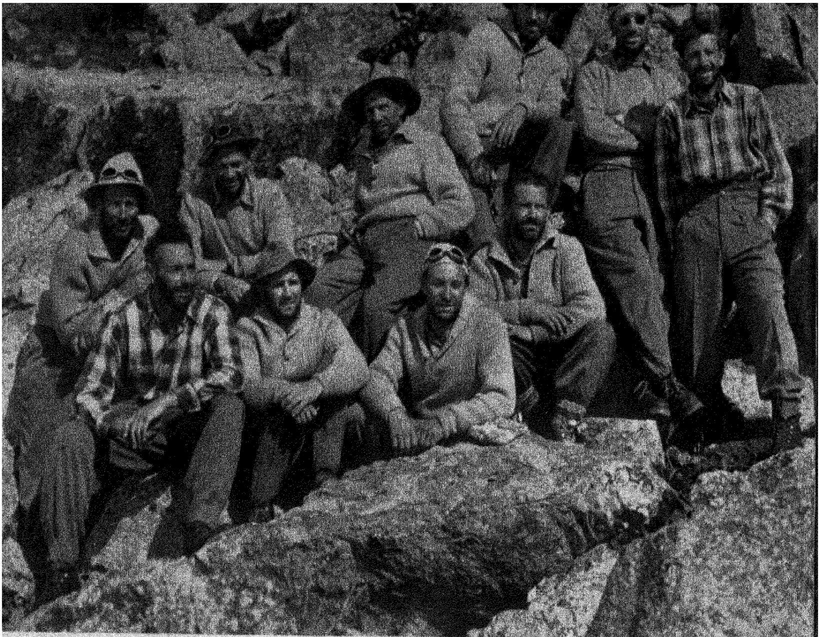
Street scene in Gilgit



Dancing Hunzas

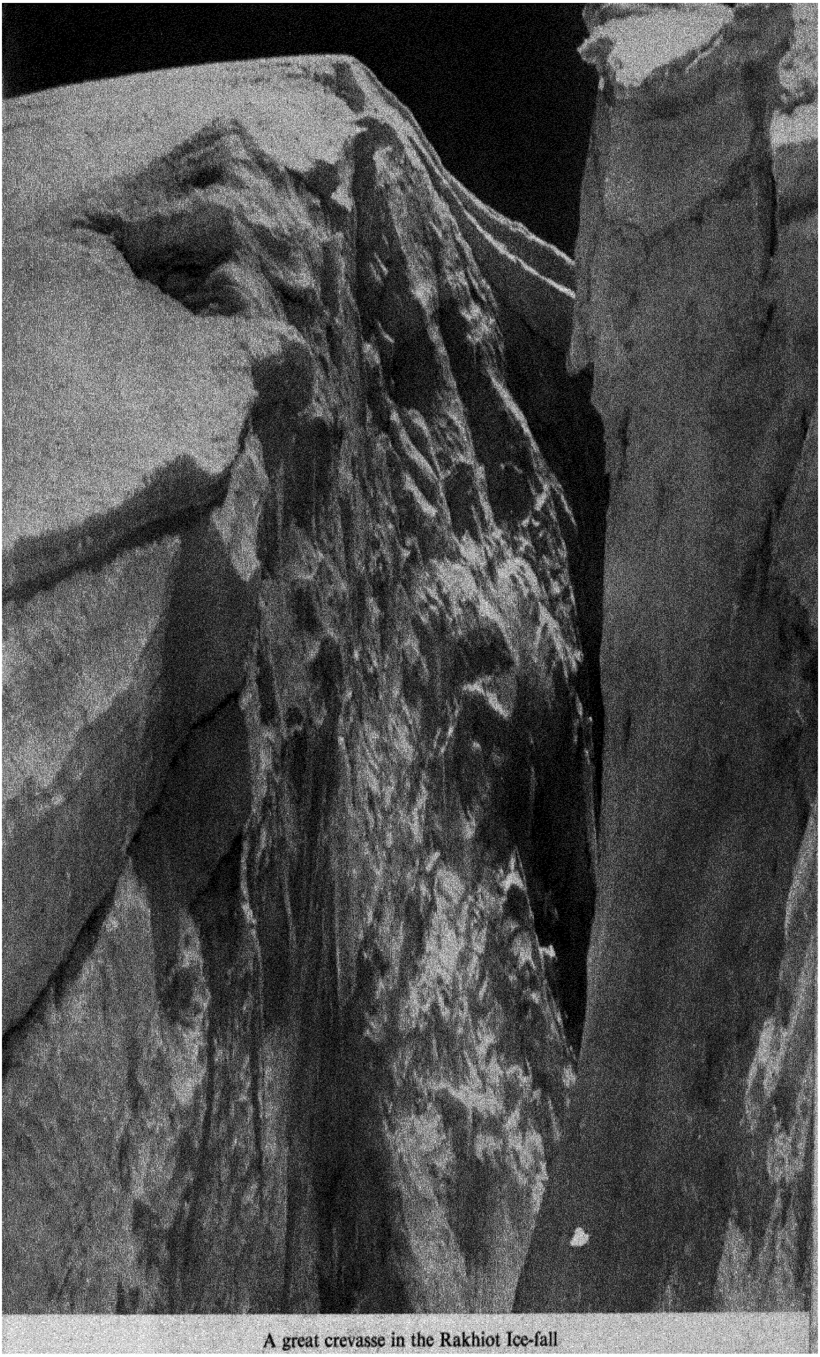


Rhabar Hassan, the Gilgit policeman and liaison officer (1953)

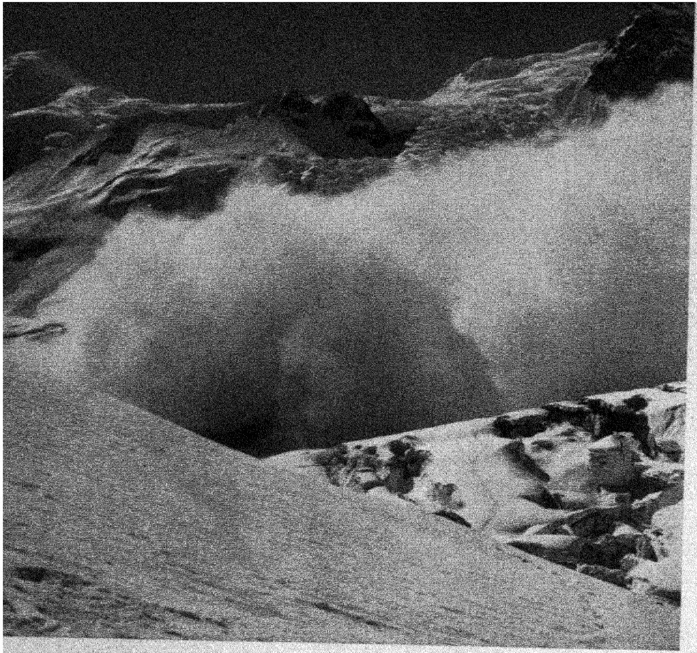


The victorious team. *From the left, front:* Ertl, Köllensperger, Kempter, Aumann. *Second row:* Frauenberger, Rainer, Aschenbrenner, Herrligkoffer, Bitterling, Buhl

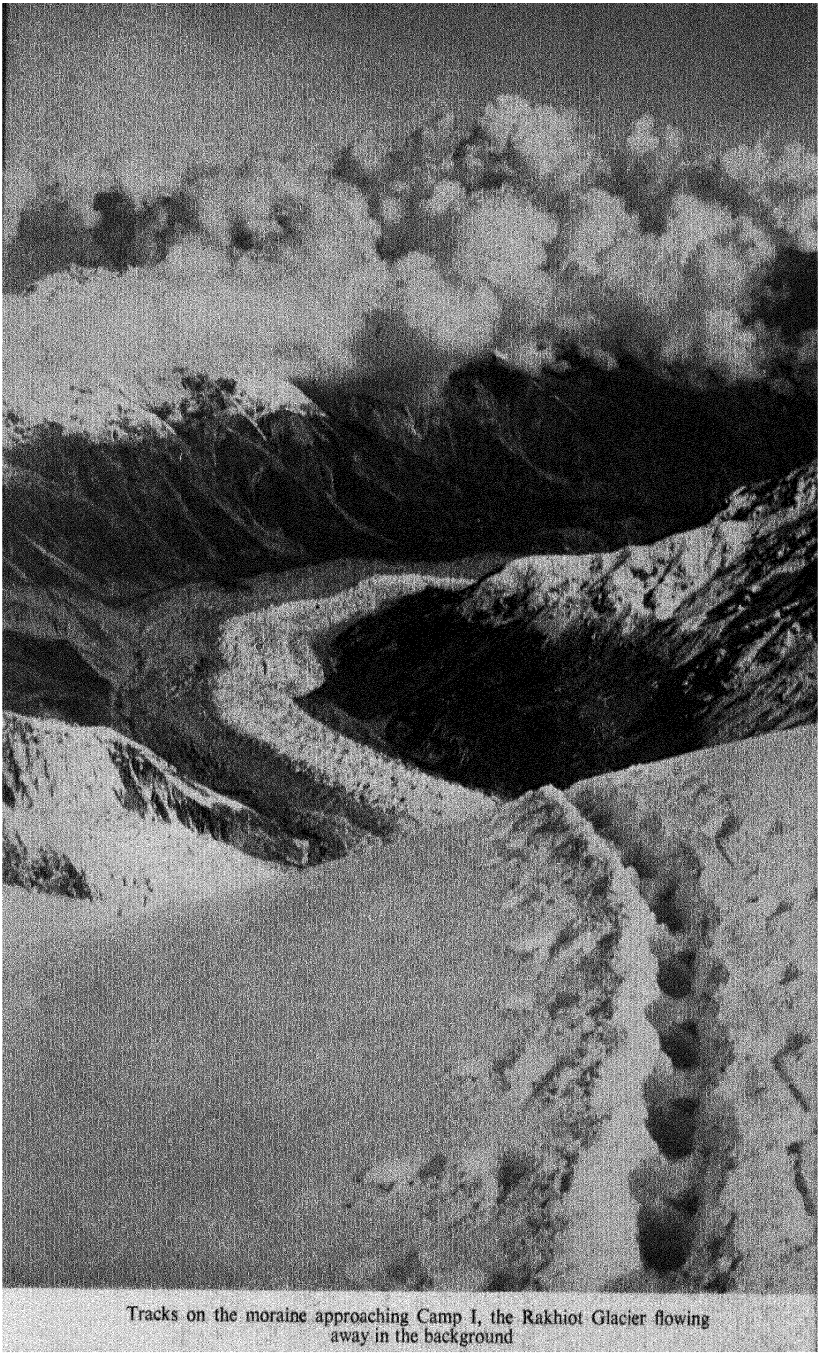
The pipe-band of the Gilgit scouts plays at the reception in Gilgit



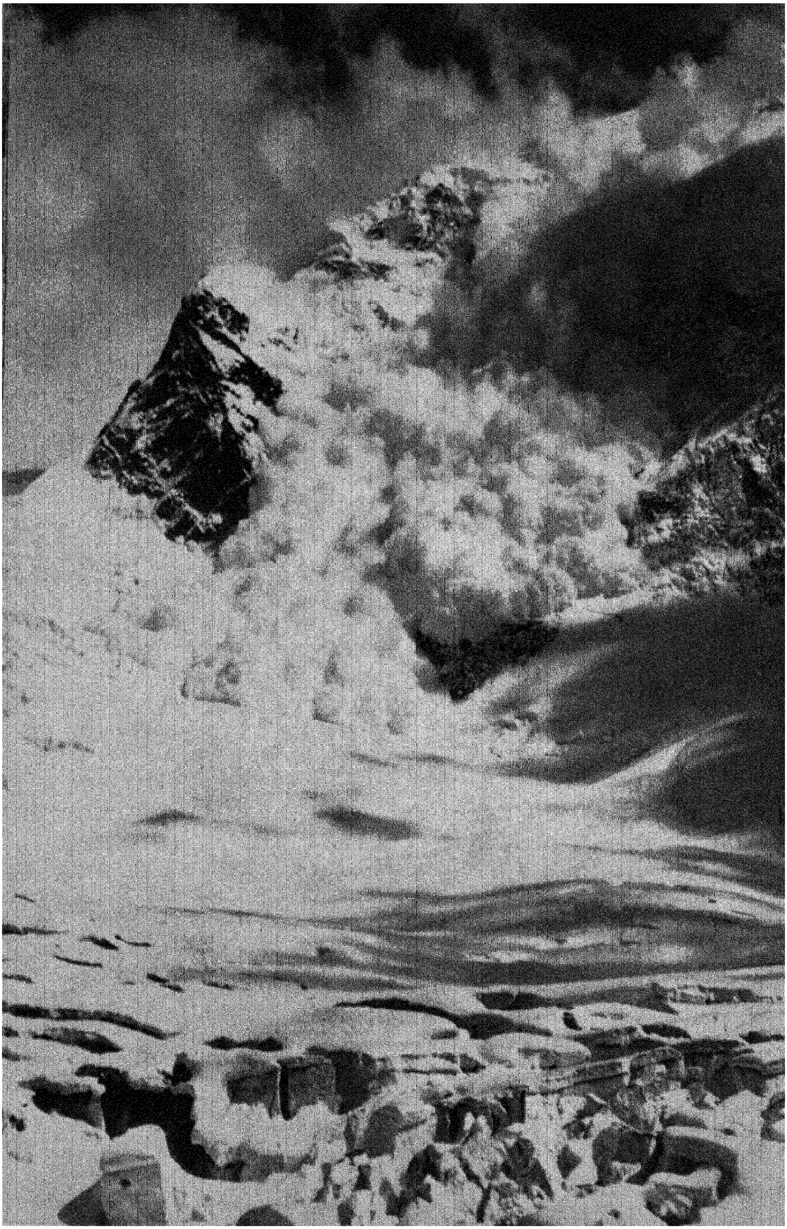
A great crevasse in the Rakhiot Ice-fall



(*Right*) Edelweiss in the Base Camp meadow
(*Above*) Ice avalanche between Camps I and II



Tracks on the moraine approaching Camp I, the Rakhiot Glacier flowing away in the background



One of the numerous ice avalanches which hurtled from the north-east flank of Nanga Parbat to the Rakhiot Glacier endangering the route between Camps I and II. The climbers called them the ' Morning Express '

The first days of July brought a long stretch of fair weather and camps were pushed up the mountain according to a strict schedule. On 3rd July Aschenbrenner consolidated Camp II on top of the Great Ice-fall by digging an ice cave. Widening the cavity inside he inadvertently broke a "window" into an adjoining crevasse which had been invisible under a cover of snow. While the expedition was moving up the glacier they preferred ice caves to tents as giving better protection against the avalanches from which no part of the lower route was entirely safe. It was later decided that the extra protection they gave did not justify the very great physical exertion involved in digging them.

On 4th July, Herron and Kunigk, the tireless trail-makers, laid a track to Camp III which, at a height of about 19,250 feet, was already on the second tier of the glacier. They had to make a detour down towards the left as the ice-fall above Camp II ended in a literally vertical wall of ice with overhanging snow fields threatening from above. Again the two proved their unfailing flair. Though too close to the ice-wall and unable to see ahead they cut through to the left under overhanging glaciers, the green tongues of which protruded above them. This way was obviously menaced by ice avalanches, but there was no alternative. As it happened their track was obliterated before the next party came along and buried beneath the debris of ice breaking away from the glaciers hanging above. Turning at last to the right they forced the ice-fall leading up to the second tier and, pitching their tent, laid the foundation for Camp III. Once more their labyrinthine route through the *séracs* and crevasses proved to be the best and was used throughout the expedition.

Camp III was no great distance from Camp II. Herron and Kunigk had spent much time in reconnoitring and in stamping a trail through the deep snow. Experience proved that with light loads porters could in a single day reach the next higher camp, Camp IV, on the third tier, and in order to alleviate a shortage of porters, the expedition of 1953 cut out Camp III altogether.

On 8th July Merkl and his friend Bechtold pushed beyond Camp III and laid a trail to Camp IV on the third and highest tier which extends above 20,000 feet close to the main ridge which swings from the Chongra Peaks across the Rakhiot Peak to the East Arête. Merkl did not bother to dig a cave, but pitched his tent which gave him greater comfort with less exertion. Camp IV would offer opportunity for acclimatization to the higher altitudes and could serve as a resting place during bad weather. From this camp—the most important for the final assault on the summit—it was possible to view the entire ascent route from the valley up the three tiers of the glacier and, looking upwards towards Rakhiot Peak, to survey the route to the East Arête and beyond, right up to the Silver Plateau. The main ridge above Camp IV swung backward to the South Chongra Peak (21,150 feet) a first ascent of which was made as a practice climb. The further route to the main summit was to follow the ridge in an opposite direction to the foot of Rakhiot Peak which obstructed the access to the East Arête and ultimately to the summit beyond. The desperate fight for the East Arête was to occupy the expedition in the coming weeks.

There were two alternatives for forcing the obstacle represented by Rakhiot Peak. One was to tackle it direct, climb its steep north-eastern ice-wall and traverse across the Rakhiot North Spur, Rakhiot West Flank, to the East Arête behind. The other was to cut through across the glacier underneath the Rakhiot North Spur and work one's way up to the Arête above, which meant passing a badly broken-up glacier area around the Spur to reach a vast avalanche-swept hollow, which the Americans called the "amphitheatre" and the Germans, the *Mulde*. Aschenbrenner and Kunigk had misgivings about the route through the *Mulde*. First there was the danger in the broken glacier area from tumbling *séracs* and brittle ice, and the vast bay of the *Mulde* with its steep rise to the East Arête seemed made for the quick release of avalanches constantly falling many thousands of feet to the lower terraces of the Rakhiot glacier. While the others saw no hope in the direct route across Rakhiot Peak, Aschenbrenner and Kunigk decided to explore it as an alternative route.

They set out on 16th July with all the paraphernalia of a summit assault, and soon stood at the foot of the steep ice-wall forming the north-east face of Rakhiot Peak. An enormous *Bergschrund* yawned in between. They decided to traverse to the right towards the rocks below the North Spur. At last they found a snow bridge which brought them against the overhanging lip on the other side; they hacked a window through the lip and hoisted themselves through. After their weeks of trailing through ice and snow they now found themselves once more on rock. However, the rock was glazed with ice and proved to be brittle and it took them three hours to traverse to the ridge of the Spur only three rope-lengths away. They agreed that this stretch offered no practical route for the porters. After a rest they moved up along the Spur until they stood above the great East Arête to the summit massif opposite, the object of their hope and despair, to which somehow a route had to be found.

Moving further up the North Spur they caught sight of the stupendous South Wall which Mummery had probed in vain, plunging from the small far-off snow pyramid of the main summit. Wistfully they gazed along the white crest of the East Arête up to the Silver Saddle, which gave on to the Silver Plateau, with the Fore-Summit, Bazhin Gap and the main summit in the background. They had completed their task of reconnaissance but could not resist climbing the last section of the rock spur to the very summit of Rakhiot Peak, 23,175 feet high, a first ascent of some significance. Its snow summit is adorned by a sharp rock needle to which Aschenbrenner promptly nailed the Tyrolese flag. Kunigk manoeuvred himself carefully to the cornice overhanging the South Wall and looked down to the floor of the Rupal valley, here some 18,000 feet below, with its moraines and grass and bushes shimmering darkly through the blue haze. On their return they glissaded direct down the steep north-east ice-wall which they had shirked on the way up and were at its foot within two and a half hours. They concluded that while the bulging steepness of the ice-wall would not necessarily preclude its use by porters, the continuation of the route further on to the North Spur and across the Rakhiot West Flank to the East Arête would not be practicable.

Merkl therefore decided on the second alternative, scarcely more desirable, the route through the *Mulde.* The assault was to begin on 18th July and all the climbers assembled in Camp IV. But precious time had been lost, and now, at this crucial stage, heavy snow falls set in. Was the monsoon about to break? For four weeks the fair weather had held and no decisive assault had been made. To make things worse, Kunigk fell ill. Acute appendicitis was diagnosed and Dr. Hamberger had to descend with him and rush him to Gilgit for an immediate operation. On 23rd July the weather cleared, but now all the porters unanimously reported ill. Aschenbrenner, Herron, Merkl and Bechtold made their way along the main ridge up to the foot of Rakhiot Peak, sinking knee-deep into the new snow with every step and carrying all the loads themselves. They established Camp V at just on 22,000 feet. Merkl and Bechtold felt too ill to go on, but Herron and Aschenbrenner set off the next day well before dawn to test the torn-up glacier area below the Rakhiot North Spur. Within this tortured maze they found conditions difficult beyond their worst fears. They turned back to Camp V with nothing to show for their efforts. Aschenbrenner had severe frost-bites on one foot which put him completely out of action. With the other young men of the team, Kunigk and Herron, he had formed the intrepid spearhead. It fell now to the more seasoned climbers to bear the brunt of the difficult days to come. None of the porters was available. Herron, Simon and Wiessner had to ferry loads to Camp V, while on 25th July Merkl and his friend Bechtold tried once again to penetrate at least to the *Mulde.* Just as they were about to enter the torn-up glacier area below the Rakhiot North Spur an enormous *sérac* broke loose from above and crashed down, gathering in its train a huge avalanche which thundered down the walls of the *Mulde.* Undaunted the two men hacked their way to a flatter part of the *Mulde* above the ice-fall and pitched their tent under the dubious protection of the *Bergschrund* as some sort of moat between them and the avalanches from the Rakhiot West Flank. With this, Camp VI was set up at last.

They were now separated from the East Arête by another 700 feet of loose feathery snow and Bechtold, Herron and Simon set off from the new camp to burrow their way upwards.

It was not a matter of stamping a trail in virgin snow, but of "clawing and pawing, putting in the ice-axe and almost swimming, without meeting any resistance", as Herron told Elizabeth Knowlton afterwards. They floundered helplessly, hardly able to keep above the surface of the collapsing walls of snow, every violent movement threatening to set off the amorphous masses in a single huge avalanche which could envelop them and carry them thousands of feet into the abyss below. They had to give up. In the meantime Wiessner had brought up two Hunza porters whom he had persuaded to assist in the assault, but who proved to be of little use.

On 29th July, Merkl, Bechtold and Wiessner fought their way right through to the snow arête. Wiessner had a good flair for snow conditions and had suspected that a few hundred feet further up the snow might be firmer. But first they had had to get through the bottomless swamp of snow below. Using their elbows and knees in a sort of swimming motion the three men squirmed their way up. This is how Merkl described the first ascent to the East Arête:

"On 29th July the three of us (Merkl, Wiessner and Bechtold) tried to push on over the upper part of the *Mulde*, this time without rucksacks and armed only with one snow-shovel. We were up to our waists in the soft loose snow and it was extremely difficult to make any headway whatsoever. The thin air began to tell on us. Every foot of height gained cost us tremendous effort. One step, five deep breaths, now the other foot—slowly, laboriously, desperately we forged ahead. Then, the rope was paid out once more and there we were, on the summit-ridge!

"The joy of this moment beggars description. Our hopes and dreams of so long had become reality! How we had schemed and striven for just this moment. Beside ourselves with sheer happiness we stood erect and viewed for the first time the main summit of Nanga Parbat. The ridge itself was bathed in light and the summit face dropped a clear 15,000 feet down to the Rupal valley. The whole incomparable scene was on a scale such as we could never before have imagined.

"We descended again to Camp VI in readiness to bring up the necessary equipment to the ridge on the following day.

Meanwhile one of the porters had succumbed to mountain sickness and the other one would not leave his side. This was a grievous setback for us but now was no time for relaxing our efforts; having reached this stage the assault must continue.

"Accordingly Bechtold and I set to work with a will and carried loads originally intended for four. Thus heavily burdened we set out once more for the ridge where Camp VII was to be set up. Our loads oppressed us cruelly as, puffing and panting and with painful slowness, we trudged on and up. It was seven o'clock in the evening when we finally gained the ridge. It was bitterly cold and there was not time to pick a good site. So, without further ado, we pitched our small assault tent on a narrow bridge in a crevasse. We intended on the morrow to climb the quite gently rising ridge towards the East Summit. Another five or six fine days and victory might well be ours. We could think and talk of nothing else. We did not stop to eat but settled down for the night and here, at an altitude of 23,000 feet, dropped off into quiet deep sleep.

"The next morning, however, great eddies of dense mist were billowing round the mountain. We tried to forge ahead but were driven back by fresh falls of snow. We huddled together in the crevasse and waited, but the snow continued unabated. There was nothing for it but to retreat to Camp VI. Twice we got lost in the impenetrable mist and were obliged to retrace our steps, but at the third attempt we found our way through the *Mulde*. Our trail had been completely obliterated and we had once more to plough along waist deep in the freshly fallen snow. We descended vertically so as to avoid setting off an avalanche. At one point we had no alternative but to negotiate a *Bergschrund* from a very awkwardly exposed position. We were dead tired when we reached Camp VI.

"On 1st August it was still snowing hard and we were forced to the unpalatable decision temporarily to vacate Camp VI, this in order to conserve the provisions in the high camps brought up at the cost of such tremendous effort. The return journey with the sick coolie was a nerve-wracking business. The man could not hold himself erect, and every few minutes he would stumble and fall, remain prostrate and lick the snow as if he had taken leave of his senses. We had to muster all our mental and physical reserves to get him down the steep ice-wall of the *Mulde.* At Camp V we ran into our stalwart friend Lieutenant Frier with four coolies. He had managed, but only with persuasion, to bring his men through the deep new snow to this point.

"Persistent foul weather drove us further down to Camp IV. Nanga Parbat was thrusting us back with her most powerful weapon. Continuous snow storms and the poor shape of the porters had worked together to bring about our downfall. The first serious assault on the mountain had been repelled.

"And now, in Camp IV we waited impatiently for the sun and for an opportunity of renewing the attack. Of the coolies now coming up half were again mountain-sick. Nevertheless, on 4th August, as the weather showed some signs of improvement, we planned our second assault on the summit. But the following day there was more snow and we were once again frustrated. Our mood was blacker than the weather.

"One morning when the clouds lifted for a few hours we looked right down into the Rakhiot valley and saw the meadows gleaming and the smoke rising from Base Camp. Our eyes lingered longingly on the dark green of the pine forests. But, during all those weary days of waiting, Nanga Parbat had only to lift her icy crown above the clouds, revealing her summit clear and close, for us to jettison all thought of the green valleys and gentle foothills. In such moments we felt uplifted, and the apathy of waiting was replaced by the burning desire to reach our goal.

"And then again it snowed. Our hopes, our dreams, our confidence in victory were buried beneath fall after fall of fresh snow. Bechtold, Aschenbrenner and Simon now decided to go down for good and start on their homeward journey. They advised us to do the same, but on 14th August, as the weather brightened again, Wiessner, Herron and I decided to try our luck once more and, with many regrets, we took our leave of the other three. In preparation for this final attempt we had to go down to Base Camp to re-provision and when, on 28th August, we were at last ready to set off up again, the short spell of fair weather had come to an end. The steep ascent to Camp II in loose powdery snow was agony, particularly for the porters. The sun beat down on us without mercy as we made our trail up the steep slopes knee-deep in snow. On reaching Camp IV heavy driving snow set in again. Nearly all our porters were complaining of frost-bite and nine of the twelve of them were feeling ill.

"The next day and for days on end the snow continued to fall and kept us imprisoned in Camp IV. As the time passed and conditions deteriorated it became clear that we should have to abandon Camps V, VI and VII as they were, and sacrifice the equipment. With snow drifts four feet deep and nine coolies on the sick list there could be no question of pressing on to an altitude of 26,000 feet. There was nothing for it but to go back, and though we realized now that retreat was inevitable we all spent a sleepless night before we could bring ourselves to make the final decision. For the battle had been a tough one, we had come near to victory, and we were reluctant to throw in our hand. However, one thing was certain: Nanga Parbat could be climbed and climbed by our route. Would we be the ones to reach the summit?"

On 1st September the decision was taken to go down. With the colossal masses of snow which had accumulated by this time it had become a question whether they could fight their way out at all. The sahibs in front ploughed a man-high trench in the snow with the weight of their whole bodies; the porters followed. If they chanced to stumble off the trail they had to be hauled back again by their companions, and the trail-makers were constantly setting avalanches in motion. On reaching Camp III the party was completely exhausted. But worse things awaited them in the Great Ice-fall. Wiessner was leading, followed by Herron, and, keeping to the route which had been used all through the summer, he stepped on to a *sérac* at the side of an enormous crevasse. Suddenly the ice under Wiessner's feet gave way. For seconds he seemed to be suspended in space; then, as tons of ice were released and went crashing into the unseen depths of the crevasse, he disappeared from sight. Herron had been unable to hold him but his pull on the rope acted as a brake. Wiessner's fall was arrested fifty or sixty feet below. The chances were that he had been killed either by the impact of the ice or by the ice blocks falling on top of him. His companions dared not venture to the edge of the crevasse for fear of dislodging further masses of ice and burying Wiessner altogether. After some time they heard a muffled shout from below. But still there was nothing they could do. It appeared later that Wiessner had been stunned for a while but was unhurt by the larger fragments of the *sérac*. His arm was injured and he found himself lying on a shelf. The overhanging wall of the crevasse above him—crevasses often widen as they go deeper—had probably saved him from being crushed, but at the same time made any immediate help from outside impossible. A pull on the rope might have freed the gigantic icicles above him and sent them crashing down on to him. He had to detach himself from the rope and make his own escape as best he could. Shocked, bruised and with one injured arm he cut steps towards a higher shelf, a brilliant feat of icemanship as Herron later testified. Once having reached this higher shelf he could be hauled up to safety. This hair's breadth escape from death seems to have been accepted as part of the general gloom of retreat and defeat, but this time Nanga Parbat had been merciful and spared the life of an eminent climber.

Yet this expedition too had to end on a note of tragedy. On the journey home Herron climbed the two pyramids of Gizeh. On the way down from the second he started to run. He slipped on a loose pebble and fell to his death about three hundred feet below.

CHAPTER IV

The German Expedition of 1934

MERKL WAS now anxious to complete what he had begun and, two years later, in the spring of 1934, thanks to the generosity of the Reichsbahn Gymnastic and Sports Clubs and to the staunch support of their then President, Heinz Baumeister, nine climbers and three scientists were able to set sail for India.

Merkl, Bechtold and Aschenbrenner were veterans of 1932 and the expedition was fortunate in having Lieutenant Frier once more as transport officer. The rest of the team were: Merkl's friend Willo Welzenbach, who in 1930 had first taken up the idea of climbing Nanga Parbat, Erwin Schneider and Uli Wieland, both of whom had participated in Dyhrenfurth's International Himalayan Expedition of 1930 to Kangchenjunga, Alfred Drexel, a railway man like Merkl, Peter Müllritter, the expedition's photographer and Willy Bernard who went as physician. Richard Finsterwalder, cartographer, Walter Raechl, geographer, and Peter Misch, geologist, formed the scientific contingent. Lieutenant Frier was supported by a second British transport officer, A. N. K. Sangster. Radio equipment was to be used on the mountain for the first time. The goodwill of the British public and of the authorities in India was won by a series of lectures, one of which took Merkl to London.

Permission to enter the Chilas region was obtained in good time, and it was decided that the local Hunza porters should be replaced by the renowned Sherpas, to be recruited in Darjeeling.

It was further agreed that the expedition should get off to an earlier start.

By the end of April the main body of climbers had arrived in Srinagar. Wieland brought with him thirty-five Sherpa porters who made the best possible impression. They were accustomed to acting as personal orderlies to the individual climbers and at once set about "mothering" their charges. For the approach an army of Kashmiris was once more recruited, but this time the Sherpas dealt with them in their own truly "tiger-like" fashion and the expedition was spared the troubles which had so distressed and confounded its counterpart in 1932.

On 2nd May the columns of porters once again set off for the long trek across the high passes which at this early season were even more deeply covered in snow. On the Burzil Pass the sahibs put on skis to push ahead, leaving the Sherpas to police the porters who, in the rising heat of the day, often dropped into the snow from sheer exhaustion. Arrived in the Astor valley the expedition no longer needed to keep off the Chilas villages to the north and make its way over the ridges, but could enter the desert gorge of the Indus which here carries the road down to Chilas. They camped near the famous Rakhiot suspension bridge which spans the broad gorge of the Indus and which, for all its solidity, looks like some delicate tracery against the monstrous rocky desert which surrounds it. From this point the expedition could proceed in comparative comfort along the length of the Rakhiot valley.

Only seventeen days after the departure from Srinagar, the world-famous Fairy Meadow was reached once again and tents were pitched for the interim Base Camp. The lesson of the last expedition had been learned and the stores were carefully guarded.

Though they were still below the snow-line the climbers found their tents deeply snowed in on the morning following their arrival. The Sherpa porters spread out their prayer-flags, a practice unknown among the Moslem tribes in these parts, and with smiling happy faces offered sacrifices to the gods of Nanga Parbat. The scientists prepared to leave for their independent expedition which took them on a grand tour round the Nanga

Parbat massif. Young Aschenbrenner promptly went off hunting, a pastime in which he was also to indulge, an older and wiser man, on the 1953 expedition. He brought back to camp two wolf cubs which were promptly adopted as mascots and christened Nanga and Parbat. The most suitable methods of teaching them civilized habits were an inexhaustible subject of conversation during leisurely evenings. After the spadework of the 1932 expedition and the careful preparation of their present assault plan, everything seemed to be progressing according to schedule. A light-hearted, expectant mood prevailed.

At this early season—it was still only the end of May—the charming meadow, carpeted with flowers and be-ribboned with a bubbling stream, which had been the site of the 1932 Base Camp, was submerged in the white waste of the winter landscape, but fortunately two small wooden poles still protruding from the snow indicated the exact spot. The Sherpas set to work with a will and soon excavated the old kitchen. Uli Wieland was tireless in organizing the porters and the storage of the loads, and also found time to set up a miniature meteorological station. To "work like Uli Wieland" was a catch-phrase of later expeditions.

Though the Sherpas exceeded all expectations in the proficiency of their icemanship, this year the finding of a route through the Great Ice-fall guarding the first tier of the Rakhiot glacier presented far greater difficulties than it had in 1932. This time the party, led by Welzenbach, got stuck midway and decided to bivouac there in spite of constant danger from the movement of the ice. On 1st June they at last managed to gain a convenient camp site near the position of Camp II in 1932. Without delay the advance party pressed on to establish Camp III on the second tier. Time was saved by dispensing with ice caves and living in tents only. But glacier conditions were decidedly worse. The ice was in motion and split into crevasses even where the camps were standing. Ice avalanches roared down from the North-East Flank without respite as the glacier groaned and cracked beneath the tents.

The glacier had so completely changed since 1932 that Camp III was at first wrongly placed. On 6th June the two Austrians, Aschenbrenner and Schneider, went ahead to make the trail to the highest glacier plateau and incidentally discovered a better site for Camp III. A blizzard had sprung up and they descended again to meet Drexel and Welzenbach who were on their way up. Drexel was in a state of exhaustion and was the last to reach the camp. He complained of a headache and during the night became delirious. The others, Welzenbach, Aschenbrenner and Schneider, urgently advised him to go down. At first he would have none of this but later agreed to descend while Aschenbrenner and Schneider went ahead again to establish Camp IV.

In spite of adverse conditions splendid progress had been made; it was still only the beginning of June. With the help of the excellent Sherpas the obstacle of the Rakhiot Peak or of the *Mulde* would doubtless be overcome. The first objective, the East Arête, seemed to be within reach. But now a blow fell which threw into confusion the work so brilliantly begun and destroyed the happy confident mood in which the expedition had got under way. Drexel arrived in Camp II breathing with difficulty, his face discoloured; he still made light of his illness, but Bechtold and Müllritter immediately sent word that Dr. Bernard should come up. Drexel had a restless night but seemed fresher in the morning; then suddenly he became worse. The Sherpas rose to the occasion wonderfully and demonstrated their utter loyalty and reliability. Bechtold's orderly, Pasang, was sent up to Camp III to fetch an additional tent and sleeping-bag, but came back with the report that the advance party had moved on to Camp IV. Drexel lost consciousness during the day. The faithful Pasang went down through the ice-fall to Camp I and on the same afternoon brought up the doctor. Pneumonia was diagnosed. Drexel's condition was serious. Pasang had already made the journey up to Camp III and down to Camp I on the same day. Now, in a raging snow storm he once more set off over the ice-fall to Camp I to fetch oxygen. He arrived back with Uli Wieland at 3 a.m. Carrying the oxygen equipment they had groped their way up over a maze of *séracs* and crevasses through the blizzard and in total darkness. But Drexel was already dead.

The news brought the advance party down from the top camps, and on 11th June Drexel was buried in a grave on top of the moraine mound overlooking the Base Camp. Eventually, after an interval of seventeen days, the assault, which had started under such happy auguries, continued under the shadow of grief. Nanga Parbat had claimed her fourth victim.

Not until 25th June did the team once more occupy Camp IV, the assault base on the highest tier of the glacier, above the 20,000 feet line, and near the main ridge between Chongra and Rakhiot Peaks. Ramona, the ever cheerful "Nanga Parbat Cook", took over the kitchen tent, where he had officiated two years before. But even then progress was slow. Merkl had originally intended to stick to the 1932 route, cutting through below the Rakhiot North Spur and crossing the *Mulde* straight up to the East Arête. But snow conditions in 1934 made this out of the question. Furthermore, a perpendicular ice-wall had formed, obstructing, the access to the *Mulde*. So Camp V was pushed along the main ridge to a point 21,950 feet high, close to the foot of the Rakhiot north-east ice-wall. With the excellent Sherpas a route might be found up the ice-wall and through the gap in the Rakhiot North Spur to the East Arête behind. Steps would have to be cut in the ice-wall and the route made safe for the porters by means of fixed ropes.

On the morning of 1st July the assault team set off. Everyone was keyed up to a state of extreme tension. Aschenbrenner, Schneider and Welzenbach were clinging to the wall like flies, cutting steps in a zig-zag path and driving pitons into the sheer ice. The first rope-ladders were put into place. Altogether 600 feet of rope was used in preparing this formidable ice-wall. The following day Merkl and Bechtold took over and, in company with the indefatigable Welzenbach, finished the work on the upper part of the ice-wall. They realized that for heavily laden porters, even of the calibre of the Sherpas, the route presented the last extremes of technical difficulty. Gradually they worked their way towards the gap in the sharp Rakhiot North Spur from which point the route would have to traverse the exposed west flank of Rakhiot Peak towards the upper part of the *Mulde* and the East Arête. With bursting lungs they gained the rocks of the Spur. Their first glance was not towards the summit which was now revealed, but to the continuation of the route across the Rakhiot west flank. Thank heaven, it was feasible.

On that day, 4th July, the Sherpas were put to their supreme test. They rose to the occasion magnificently. Some of them had never before been on a slope of this breath-taking steepness. But whenever a sahib looked anxiously back he saw proud, smiling faces. Schneider and Aschenbrenner had already stretched a guide rope over the glazed slabs of the west flank and every single porter crossed this ultra severe pitch with the abyss of the *Mulde* yawning below.

At last they were on the East Arête. It had come off. Camp VI went up fairly close to Rakhiot Peak. The next day, 5th July, the party pressed on. The race against time was on. Thick clouds were already gathering in the valleys below. Wieland, for the first time, handed over the task of supervising the porters to others. Was this already a sign of failing strength? Some of the Sherpas, too, reported sick and went down.

The sharp snow ridge of the East Arête is broken by a dramatic crag of black granite, about fifty feet high. This was named the Moor's Head. Did it not look more like a tombstone? After the Moor's Head the Arête takes a sudden dip of 400 feet and then sweeps in an elegant curve up to the Silver Saddle which, flanked by the two east summits, gives like some mystic portal on to the great Silver Plateau. This vast expanse, 24,500 feet up, still kept its secrets. The next camp, Camp VII, was set slightly beyond the dip at an altitude of 23,570 feet, on a curiously shaped, billow-like snow formation which the climbers called the *Schaumrolle* or Whipped Cream Roll. The climbers spent a restless night, Welzenbach and Wieland complaining of breathing difficulties. The next morning two more Sherpas reported sick and had to be taken down by Bechtold. Now only eleven porters were left to support the last vital thrust up to the Silver Plateau.

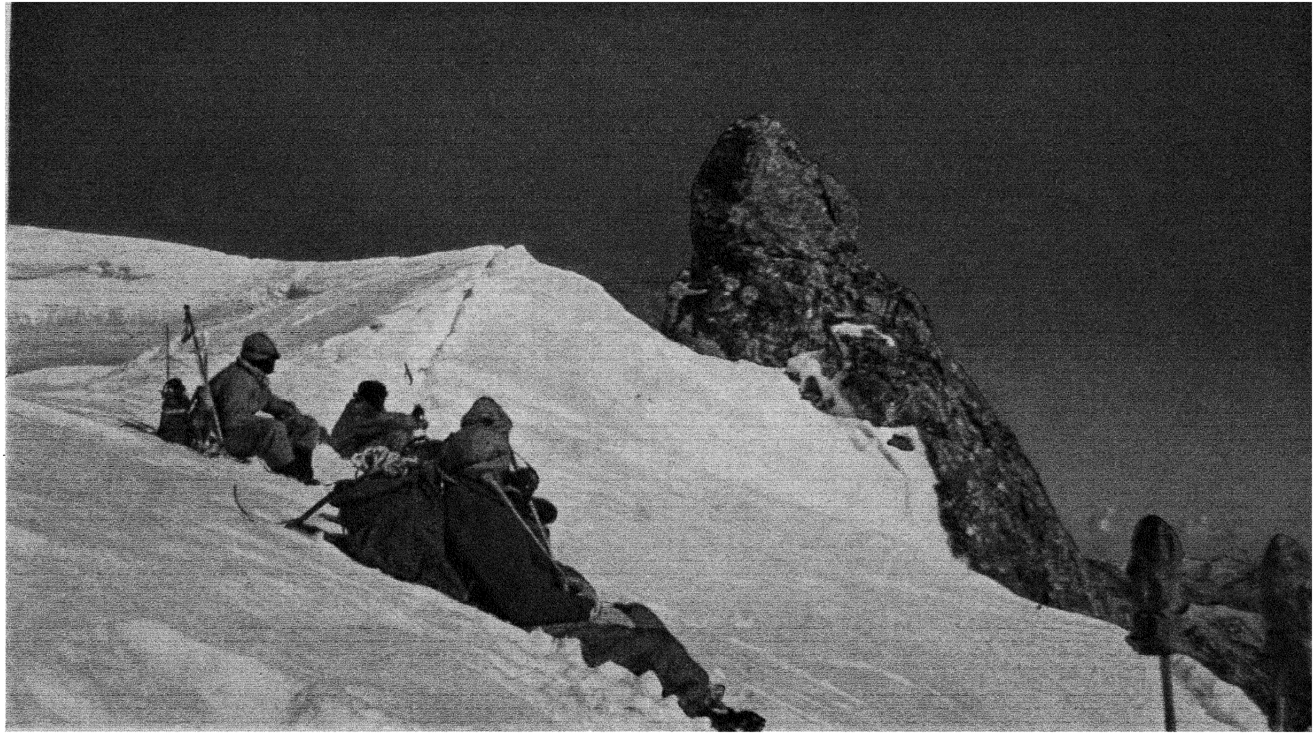
The lower camps were already experiencing heavy falls of snow, but the advance party were above the clouds and enjoying glorious sunshine. On the morning of 6th July five climbers and eleven porters started off for the Silver Saddle. Aschenbrenner and Schneider, who were still in excellent form, pushed ahead and cut steps for the party following. At 10.30 a.m. they set foot on the Silver Plateau. The breath-taking vista was opened for the first time as the vast wind-fluted plateau spread before them. At its far corners they could see the two north summits to the right and the Fore-Summit to the left, between them the wide sweep of the Diamir depression. The final route from the Fore-Summit to the summit proper was still hidden.

Aschenbrenner and Schneider waited for two hours until at last Welzenbach with two porters could be seen emerging from the rim of the Silver Saddle. Then they went ahead to find a site for the final camp, Camp VIII, as near as possible to the plateau's far extremity. They lighted on a suitable place about 200 feet below the Fore-Summit and waited for the others to catch up. But nobody came. Schneider went back. After a further one and a half hours of waiting Aschenbrenner too returned to the Silver Saddle. Merkl, Welzenbach and Wieland had arrived there with their eleven porters at 2 p.m. and had at once decided to pitch their tents for Camp VIII there. Schneider had failed to persuade them to push on to the further edge of the plateau.

Speculation was rife later as to whether the two Austrians could not have reached the summit of Nanga Parbat on this occasion had they not twice halted, once on the Silver Saddle and later below the Fore-Summit for the rear party to catch up. They had reached a point where they were only 900 feet below the main summit and little more than half a mile's distance. But the experience of Hermann Buhl suggests that these calculations were ill-founded, and it is very likely that Buhl was grievously misled by them.

Everyone in Camp VIII was convinced that the morrow would bring the fulfilment of their dream, and the anticipation of victory was so keen that no one could settle down for the night. Even post-summit plans came in for discussion.

Towards the morning of 7th July it became evident that a storm was brewing; as the hours passed the wind increased in



Walter Frauenberger fixing the memorial tablet to Willy Merkl, Willo Welzenbach and Uli Wieland on the Moor's Head. At the same hour, 5.30 p.m. on July the 4th, 1953, Hermann Buhl appeared on the Silver Saddle from his conquest of the summit

strength and swelled into a mighty gale. Coldly, abruptly, the golden dreams of achievement were shattered. Under the impact of the storm the tent poles snapped, and in spite of tight lacing fine snow penetrated the tent flaps and settled inches deep on the sleeping-bags. The camp was enveloped in dense fog and the wind lashed the tents with tempestuous force. It was almost impossible to breathe in the open and, worst disaster of all, the petrol stoves failed so that no warm food could be prepared.

The second night brought no sleep. The elements were unleashed and the storm raged on. There could no longer be any thought of reaching the summit; it was now a question of survival, of the climbers' extricating themselves alive from this witches' cauldron.

On the morning of 8th July they decided on retreat. Schneider and Aschenbrenner went ahead to make the trail, Merkl, Welzenbach and Wieland following at some distance with the Sherpas. This main column was already in poor shape and had not even reached Camp VII on the *Schaumrolle* when dusk fell.

Below in Camp IV no one had any suspicion of the tragedy about to be enacted above and there was still full confidence in victory. Camp V, however, was cut off by deep snow and on 7th July (the day which kept the advance party storm-bound in Camp VIII), a small party from Camp IV tried to open up the route to Camp V, but were forced back by the loose, newly-fallen snow. A blizzard raged all through the following night and it was only during that night that the advance party realized the mortal danger of their situation. On the morning of the 8th the clouds parted for a moment and the watchers below saw five men descending from the Silver Saddle. Were they returning from a victorious assault on the summit? No one knew what the weather was like up there. . . . At 7 p.m. Aschenbrenner and Schneider suddenly appeared in Camp IV totally exhausted. In the blizzard they had become separated from their three porters and the main party in the rear who, they said, would follow in due course. The summit had not fallen, but they still hoped another attempt might bring victory.

In the days which followed, however, a drama of heart-rending tragedy unfolded itself before the helpless onlookers below. The next morning, 9th July, the clouds parted once again to reveal the East Arête. A large party was seen descending from the Silver Saddle. It seemed incredible that they had got no further than this in the two days which had passed. Higher up on the ridge one man was seen to sit down. Once more the snow storm lowered its cruel curtain. The vision was lost. Later it was known that Wieland had lain down in the snow there and died from exhaustion. It was now clear beyond peradventure of doubt that the men on the East Arête were engaged in a life and death struggle and that their comrades below were powerless to help them. During the night more fresh snow fell. The next morning, 10th July, seven porters were seen coming down from Rakhiot Peak. Only four of these reached the shelter of Camp IV, the other three, exhausted and suffering severe frost-bite had collapsed and died on the Rakhiot flank. Among the survivors were Pasang, hero of Drexel's last hours, and Kikuli who later won renown as Sirdar on K2.

It was now learned that the main party in their retreat had had to bivouac while still on the Silver Plateau and that one of the porters had died during this night. Angtsering and Gay-Lay, Merkl's orderlies, and another porter, Dakshi, who felt ill, had bivouacked a second night on the Silver Plateau. As already recorded, Wieland had died on the way to Camp VII.

Owing to lack of sleeping space at Camp VII—there was only one tent there—Merkl had sent four porters on to Camp VI. This proved to be their salvation. Unable to reach the camp in the blizzard, they had spent the night in an ice cave. Continuing their descent on the following day, they had run into the three porters who had been in Aschenbrenner's and Schneider's party but had lagged behind. Two of them were beyond help and died the same day. One man of their own party had also died. Such was the story, told in gasps, of the four Sherpas who reached Camp IV. There was little hope that those they had left behind were still alive.

There followed two more nights of snow and storm. On 12th July Aschenbrenner, Schneider and Müllritter, with three Sherpas, set out once again from Camp IV to fight their way through the billowing masses of new snow to Camp V. This they accomplished, but their further advance was foiled by the onset of another furious blizzard. The outlook now seemed utterly hopeless and it was decided that the high camps should be evacuated the following day.

But on that day, 13th July, the curtain of cloud was once more swept aside and the incredulous watchers below saw three men descending from Camp VII on the *Schaumrolle* towards the dip in the East Arête (Camp VI lay on the counter-gradient near Rakhiot Peak). One man was seen to step forward and cries for help were carried down with the wind. On the evening of the next day Angtsering, Merkl's young orderly, staggered into Camp IV, in the last stages of exhaustion and suffering severe frost-bite. It now became clear that the three men who had been seen on the previous day were Merkl himself and Angtsering and Gay-Lay. The two orderlies had been the last to leave the bivouac on the Silver Plateau on 11th July after their fellow porter Dakshi* had died in his sleeping-bag. They found Merkl and Welzenbach in Camp VII. There was nothing to eat, but Merkl was confident that the comrades, who could be seen below in Camp IV, would come to the rescue, bringing food with them, and he preferred to wait. During the night of 12th July Welzenbach died. Merkl and his two orderlies were now the only living men on the Arête. They left the *Schaumrolle* on the 13th, Merkl painfully supporting himself on two ice-axes. He could not manage the rise to Camp VI on the Rakhiot side of the Arête and so an ice cave was dug in the dip. It was during that day that the clouds had parted and Angtsering was seen from below and his shouts heard. Gay-Lay shared his own groundsheet and porter's blanket with his master, while Angtsering had only a blanket. As the following day, 14th July, still brought no rescue, Merkl agreed that Angtsering should fight his way down alone and summon help. He and Gay-Lay were so weak that they could move only three yards from the cave. So Angtsering had come to tell of their plight.

But no rescue was possible. The next morning, 15th July, the wind still carried cries for help from the Arête to the helpless onlookers below, but nothing could be seen. During the course of the 16th and 17th, Aschenbrenner and Schneider made desperate attempts to reach Camp V, but without success. Their state of mind is barely imaginable. The blizzard raged on without respite. The cries from above ceased. Willy Merkl and his faithful Gay-Lay were silent for ever.

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*Dakshi had won fame for his climb of the North Col of Mount Everest in 1933 without climbers' escort.

There is little doubt that Gay-Lay laid down his life in loyalty to his master. He had been Bruce's servant on the Mount Everest Expedition of 1922 and had at first been considered too old to take part in the Nanga Parbat Expedition. But he had proved himself magnificently from the start. During the fateful night of Drexel's death Merkl had sent him to Base Camp to fetch oxygen which Wieland and Pasang took back through the ice-fall. An obituary in the *Himalayan Journal* said of his last days: "He deliberately chose the heroic part of staying beside his leader and master and sent down the younger porter Angtsering to safety. . . . He was married and left a widow."

For some years it was presumed that Merkl and Gay-Lay had died where they had been left by Angtsering. But in 1938 Merkl's friend Fritz Bechtold stood once more on the East Arête and discovered that Merkl must have dragged himself up to the Moor's Head. It is probable that it took him several days to work his frost-bitten limbs up this 400 feet rise. Bechtold wrote later: "Willy's posture suggested that when he had lain down he had not done with life. He had slipped off his gloves and spread them out on his thighs. He looked as if he had just wanted to rest a while." The Moor's Head, a compact block of granite, symbol of inflexible resolution, became Merkl's natural monument.

In Willy Merkl's pocket Bechtold found the following note written by Willo Welzenbach in Camp VII on 10th July, 1934:

> "To the Sahibs between Camps VI and IV, particularly Dr. Sahib. We have been lying here after having lost Uli (Wieland) on the way down. Both of us are sick. An attempt to get through to VI has failed owing to general weakness. I, Willo (Welzenbach), have probably got bronchitis, angina and influenza. Bara Sahib (Merkl) is in a state of exhaustion

> and has frost-bite on hands and feet. Neither of us has had any warm food for six days and we have had hardly anything to drink. Please send help to us here in Camp VII.
>
> Willo and Willy."

Thus Welzenbach's and Merkl's last letter, and the last chapter in a disaster, which in sheer protracted agony has no parallel in mountaineering history.

CHAPTER V

The German Expedition of 1937

AFTER THE frightful disaster of 1934 the mountaineers of Germany closed their ranks and, under the inspiration of Pau Bauer, who had led the two great German Himalaya expeditions of 1929 and 1931 to Kangchenjunga, the German Himalaya Foundation came into being. With the experience of the 1932 and 1934 expeditions to draw upon Bauer maintained that Nanga Parbat offered better prospects of success than Kangchenjunga and he proposed to tackle it in 1936. The British Government, however, would allow only one expedition a year over the "Gilgit Road" across the Burzil Pass (as a precaution against the entire dislocation of local transport) and a large French expedition had already been sanctioned for that year. It was decided therefore that the 1936 expedition should again go to Kangchenjunga and should serve as a preparation for a major assault on Nanga Parbat in the following year. Bauer took with him Karlo Wien, whom he had earmarked as a possible leader of the Nanga Parbat expedition, and who, with Adolf Göttner and Günther Hepp, would form the nucleus of the 1937 team. Wien had already been on Kangchenjunga with Bauer in 1931.

Accordingly, the German Himalaya Foundation was able to muster an impressive group of climbers for its 1937 Himalaya expedition. Hans Hartmann, Wien's companion on the 1931 expedition to "Kantsch", was persuaded to join the party. Hartmann was at first reluctant; he had been so severely frostbitten that the front halves of both his feet had had to be amputated and he had to wear short boots which gave his feet the appearance of horses' hooves. He felt he might be a drag on the party and that his place should be taken by one who was a hundred per cent fit, but he was overjoyed when his scruples were overridden. He had since 1931 been making a close study of the effects of high altitude on human physiology. He was joined by Peter Müllritter, a survivor of the disaster of 1934, Pert Fankhauser, and Martin Pfeffer. Uli Luft was attached to the expedition as physiologist and Karl Troll accompanied it as geographer and botanist. It was a very powerful team and enjoyed the backing of the whole German nation. Wien had personally selected a fine team of Sherpas the previous year and much of the equipment had already been sent out. Hopes ran high.

The expedition's progress from Srinagar followed the now familiar "Gilgit Road" (the last time that this route skirting the mountain to the east was used for the approach). In spite of bad weather Camp IV was established on 11th June, this time in a shallow declivity somewhat nearer to Rakhiot Peak. Compared with the route up the Rakhiot glacier which was under the constant threat of avalanches, Camp IV, just below the main ridge between the Chongra Group and Rakhiot Peak, seemed to be relatively safe. Far away an inconspicuous ice cornice was seen to be suspended from the main ridge leading up to Rakhiot Peak but was not considered to be a serious threat. It was intended to push ahead without delay and establish Camp V nearer to the foot of Rakhiot Peak. On 14th June the only climber in the lower camps was the physiologist Uli Luft who was working at Base Camp. All the others were up at Camp IV with nine Sherpa porters, making sixteen men in all, an extraordinarily high number considering that the initial build-up was still in progress and no decisive assault was under way.

It seems to have happened shortly after midnight according to the watches of the dead men. The small cornice suspended from the Rakhiot east ridge broke away and, gathering an enormous avalanche on its long and comparatively flat course, swept right on to Camp IV, burying the men there as they slept.

Down at Base Camp Uli Luft was without forebodings. He had had a note from Wien telling him that Camp V would be established immediately the weather improved and the weather since had been absolutely magnificent. On 16th June he decided to take a convoy of five porters with provisions and mail up to the high camps. On the 18th, three days after the night of the avalanche, he led his troupe from Camp II to Camp III in brilliant weather, looking expectantly towards Rakhiot Peak where Camp V should have gone up since he had last had news. He hurried on to Camp IV, and by midday reached the original site which he knew had been evacuated on 10th June in favour of one higher up which was considered safer.

He could make out the track which led onwards from above the still hidden camp though there was no sign of any activity. At last he found himself on the uppermost tier of the glacier at a height which revealed the entire sweep of the main ridge from the Chongra Group to the Rakhiot Peak ahead. The hollow where the camp should have stood was filled with broken masses of ice; a faint trail led away along the steep ridge and lost itself at the foot of the Rakhiot Ice-wall.

As Luft stood in utter and bewildered loneliness on the spot where he should have found a scene of bustling activity (eager to join his friends he had hurried ahead of the porters) he could no longer shut his mind to the terrible meaning of the leaden silence around him. A gigantic avalanche had hurled tons of ice over the entire plateau of the glacier and had carried a few scattered tins and rucksacks into the abyss below. The camp must lay buried somewhere beneath his feet.

For several desperate hours Luft and the porters who had joined him attempted the impossible—to cut with their light picks through the many layers of ice-blocks, which by then had congealed into a solid mass, and to extricate the climbers. But even if by some miracle they had hit on the exact spot and had been able to remove the cover of ice, there could be no hope of finding their friends alive. According to the assault plan the higher camps should have been established well before this; the disaster therefore must have occurred several days earlier. Had any of the climbers escaped they would long since have made contact with the lower camps.

The fact had to be faced: the mountain which already had devoured so many lives had at one vicious blow trapped and destroyed the flower of German climbers. Describing later the moment when he fully realized that he was powerless to help his friends even in death Luft said: "The Silver Saddle gleamed in the sun high above me, serene and withdrawn. The team was no more."

A short message transmitted by Reuter informed the world of the unparalleled tragedy. The German nation was shaken to the core. When the details of the disaster became fully known, Bauer at the Himalaya Foundation Headquarters in Munich felt that only one course was open to him. As the head of the Foundation he had devised the whole project, trained the nucleus of the assault team and finally sent them on their way. Although the season was well advanced he conceived it his duty to go out himself and take charge of the excavation work.

He summoned Fritz Bechtold, co-founder of the organization, and Dr. Kraus. The British government placed an R.A.F. 'plane at their disposal for the flight from Lahore to Gilgit, an offer which was gratefully accepted as a "splendid gesture". On 8th July they arrived at the foot of the mountain. Bauer was met near the Base Camp by Luft and the two men shook hands in silence. Da Tondup, sole survivor of the magnificent Sherpa team, and the faithful "Nanga Parbat Cook", Ramona, were there too.

The story which Luft told was not encouraging. Prodigious help had been given by the British. Lieutenant Smart who had been at Base Camp as transport officer had, immediately he heard of the disaster, sent a runner to Chilas to fetch coolies with pick-axes and spades. Captain Mackenzie had arrived from Chilas, having ridden day and night to summon all available porters with implements, and large numbers of mountain peasants had begun to stream into the Base Camp. Soon after, Major Cropper had brought a picked team of Scouts who were trained climbers. He himself had covered 160 miles on horseback and had climbed up straightaway without stopping for rest. He it was who had brought Uli Luft the news that Bauer was on his way out from Germany. In spite of all endeavours it had not proved possible to force the Great Ice-fall before Camp II where considerable ice movement had destroyed all the tracks. In the meantime the army men had had to leave because of other duties.

The situation was grim. There could be no question of gradually building up the route to Camp IV; there was not enough equipment nor enough men. And, assuming they could reach the scene of the tragedy, a major problem would still confront them there. Himalayan ice is tough, and solidifies into a gluey compact mass which cannot be splintered off with pick-axes, but has to be carved out layer by layer. Would the few men who might fight their way up have the sheer physical strength to locate the lost camp beneath the gigantic avalanche and then extricate it? It was a desperate task and was undertaken with the slenderest resources.

Before setting out, Bauer had to redeem another promise to assuage an earlier grief. The Base Camp marked the grave of Alfred Drexel, the first of Merkl's comrades to die in 1934. Drexel's parents had given Bauer roses and earth from his home and a small candle to be the modest implements of a service of commemoration. Bauer and his friends gathered around the grave and, shielding the flickering flame from the chill evening breeze, stood there with their thoughts and their prayers until the candle had burned itself out.

Bauer scanned the remote scene of the disaster through his telescope, but there was no movement to be seen. Once he thought he could make out a tent; but closer scrutiny revealed the shape as yet another block of ice amidst the dead wilderness of the glacier. "In the heights above nothing lived." With these words Bauer recounts his final resignation to a task of merely salvaging the dead bodies of his friends.

Bauer was forced to the conclusion that the normal route through the Great Ice-fall would now be impassable. As long as the surface remained hard it could be negotiated in spite of the considerable movement of the ice underneath. But the heat of the many perfect summer days just past had loosened the surface. By an irony of fate the weeks following the disaster would have offered an ideal period for an attack on the summit.

The only possible way to overcome the ice-fall was by keeping more to the right nearer to the dreaded North-East Flank. Because of the heat its huge rock walls and couloirs were now clear of snow and avalanches were less probable. It had to be risked.

To make matters worse Bauer was laid low with an attack of malaria soon after entering the ice-fall and had to be carried back to Base Camp. Bechtold, Kraus and Luft, however, got safely through. Three days later Bauer was able to observe the party approaching the scene of the disaster. But then Bechtold fell ill and had to turn back in company with a sick porter. The exertion of the forced ascent had been too great. He told Bauer that the avalanche field was enormous and, as Luft had estimated, must cover an area of fifteen acres. It was frozen like rock and there was not the slightest indication where the buried camp might be.

Bauer determined to go up at once to assist his friends and after doctoring himself with quinine set out with one porter, Jussup Khan. Jussup Khan had been responsible for spreading wild stories about the disaster in the village of Tato. He had said that the white women of the mountain had come every evening to dance before the Sahibs in Camp IV and that they had in the end destroyed the camp while all the men were sleeping. With this strange companion Bauer reached Camp IV on 20th July, i.e., in two days, a terrific feat for a man no longer young and not yet acclimatized. He found there Ramona, the faithful elderly cook, who had generously offered his help for the excavation, but was now feeling ill. He pointed further up where the others were digging. Snow was flying from a trench on the edge of the vast avalanche field. Luft, Kraus and two porters were digging there.

The day before they had, by a million to one chance, found the camp site. For five days they had dug trenches here and there and had begun to feel discouraged by the hopelessness of their task. Then Luft had dug up an ice-axe, then two cigarette ends, then an empty tin. The camp could not be far away.

At a height which made every movement arduous, the party laboured to probe into the granite-like frozen mass of the avalanche, ten to thirteen feet thick, in which their dead comrades were buried. It was body-breaking and heart-breaking work.

After two hours, Luft's implement encountered a human body and, there, his face peaceful, his woollen cap stiff on his frozen curls, lay Pasang. As Sirdar Nursang had requested that the corpses of the Sherpas should remain undisturbed, they dug no further at this spot. But this sad discovery enabled them to decide the approximate site of the climbers' tents—and they set to work again.

Their probes located the position of two tents and they redoubled their efforts, hacking out two trenches down to them, fighting the ice for every inch. At last they managed to uncover one of the tents. In it, embedded in the snow were the bodies of Pfeffer and Hartmann. Beyond, more inaccessible, lay another. The faces of the two men were relaxed and calm, as if they dreamed serenely; their bodies were at ease. The watch on Hartmann's wrist had stopped at 12.20. Bauer put it in his pocket and it started to go again in the warmth. The disaster, then, must have occurred at, or shortly before, 12.20.

The third body was more difficult to release from the vice-like embrace of the ice. Almost super-human work was required of the team before the body of Günther Hepp was freed.

The tent in the second trench was the one occupied by Wien and Fankhauser. A huge block of ice, about 25 feet wide pressed down on the top of it and defied the endeavours of the rescue party, already exhausted by their exertions. They found almost all the personal belongings of their friends and much of their equipment, which was intact—the barograph by Wien's side stood ready for use—but they had to stop their attempts to remove the bodies that day.

On the following day, only two members of the rescue party were in fit condition to continue the grim task. Kraus and Luft alone were able to work. The two hefty porters were ill, and Bauer, physically spent, could merely encourage and advise the diggers. Finally, the icy tomb yielded up the bodies of Wien and Fankhauser, and they, with Hartmann, Hepp and Pfeffer were laid in a communal heroes' grave.

The bodies of Müllritter and Göttner were never recovered.

The rescue party had to abandon its search for the last tent which lay somewhere deep down in the bowels of the avalanche.

The team was utterly exhausted and at the end of their endurance; their food and fuel supplies were used up. Sadly they paid their last respects at the graveside of the brave men whose lives had been claimed by Nanga Parbat. Pick-axes, probes and rope marked the burial ground and a slab of ice stood as a tombstone. A thunderstorm began to break as they wearily staggered down towards Base Camp, their gruelling toil ended.

Bechtold and Smart, meanwhile, were anxiously awaiting the party's return. Their telescopes scanned the mountain, and as the hours went by, they grew more and more fearful for the safety of the rescuers. Just as they decided to set off on a search, the stumbling figures appeared in sight. The tragic mission was accomplished.

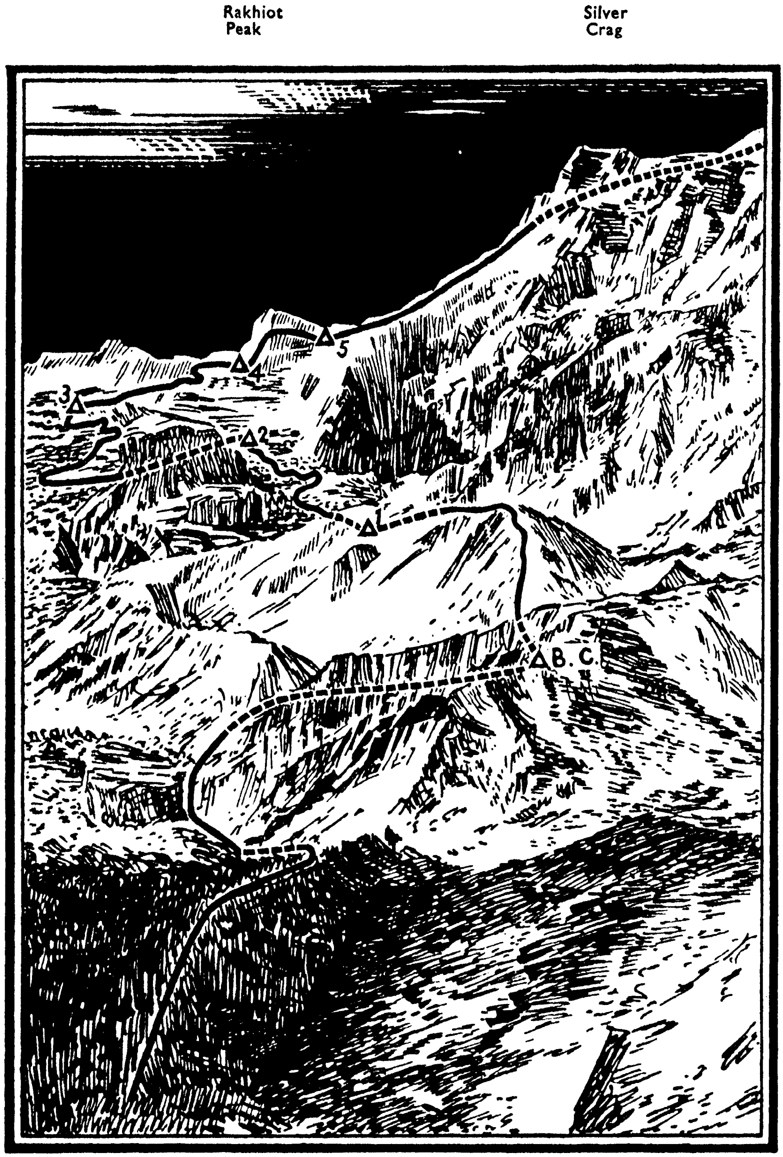
A number of unforeseeable circumstances was responsible for the tragedy which overtook this 1937 expedition. The extraordinarily cold weather and an heavy fall of snow had produced a hard, powdery surface, over which the ice of the avalanche slid to a much greater distance than would normally have been the case. The camp, which had been set, for safety, in a hollow, was completely deluged by the fall.

The men had apparently been totally unaware and unwarned of the approaching end. The composed expressions on their faces, their relaxed limbs, showed that death overtook them as they slept. Nanga Parbat had shown some mercy to her victims.

It seemed that Fate must have willed that the whole team should perish. In the first place Camp IV had been moved to an apparently safer site, yet the original site remained unscathed; secondly, if Camp V could, as was intended, have been established on 14th June, the team and the Sherpas would have been distributed in two camps instead of all being assembled in the one.

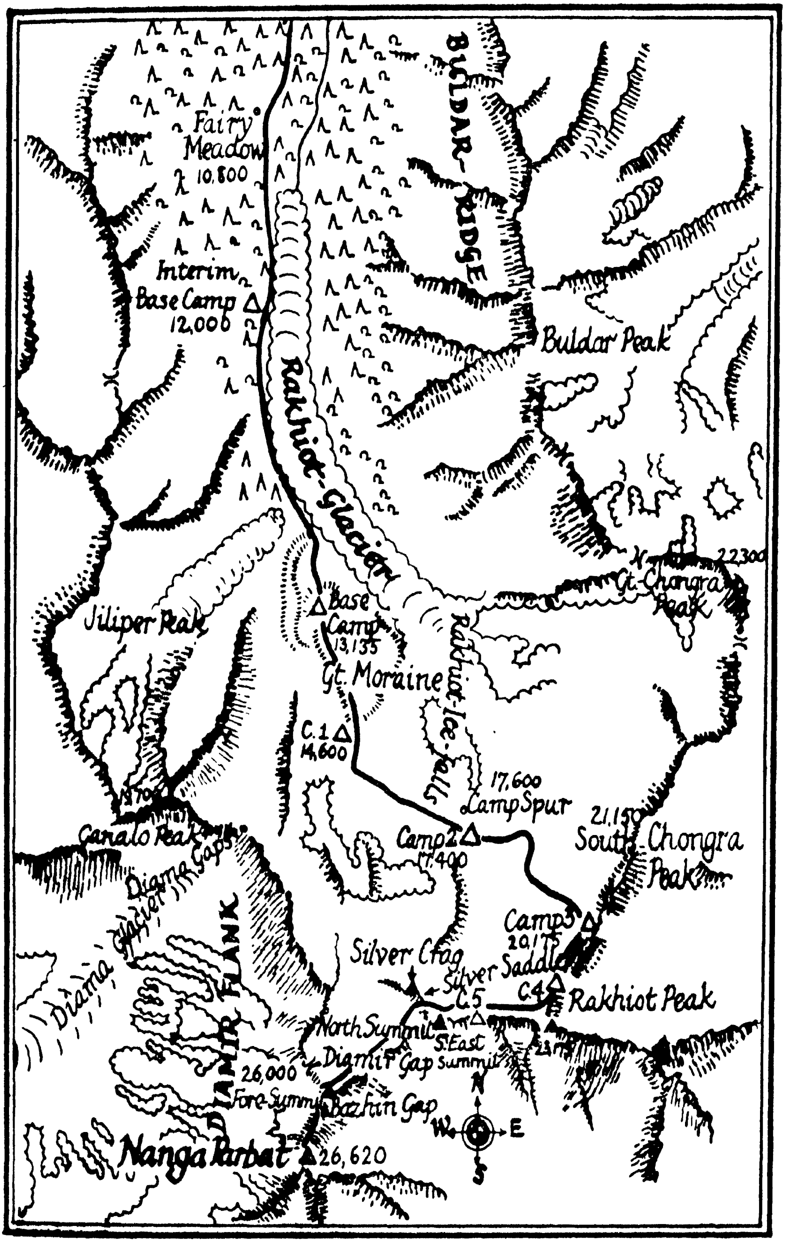
On receiving the news of the disaster, the Calcutta *Statesman* said in a leading article:

"To Germany Nanga Parbat will call more challengingly still. For German mountaineers have a claim to it that all recognize with sympathy. 'Homage to the dead,' wrote Dr. Karl


Rakhiot
Peak
Silver
Crag
5
4
3
2
1
B.C.

The Camps on the Rakhiot Route (1953)

For numbering of Camps see p. 160.


Fairy Meadow
10,800
BULDAR-RIDGE
Interim Base Camp
12,000
Buldar Peak
Rakhiot-Glacier
Base Camp
13,135
Jiliper Peak
22,300
Gt. Chongra Peak
Gt. Moraine
Rakhiot-Ice-falls
C.1
14,600
17,600
Camp Spur
21,150
South Chongra Peak
Ganalo Peak
Diama Gaps
Diama Glacier
Camp2
17,400
Camp3
20,175
Silver Crag
Silver Saddle
C.5
C.4
Rakhiot Peak
DIAMIR FLANK
North Summit
S.East Summit
Diamir Gap
26,000
Fore Summit
Bazhin Gap
N
W
E
S
Nanga Parbat
26,620

The Rakhiot Route (1953)

Wien some weeks ago, 'demanded that after 1934 Nanga Parbat should be the goal of the next German expedition to vindicate that tragic blow.' Seven more Germans lie in that ice and snow to make the argument still stronger. A throwing away of good lives? When men no longer risk their lives in trying to do things never yet done the human race will be on the downward curve."

The history of mountaineering has no parallel to the disaster of 1937, but the German climbers had not yet finished with Nanga Parbat.

CHAPTER VI

The German Expedition of 1938

BAUER, UNDAUNTED, decided himself to lead a further expedition to Nanga Parbat. Although he was no longer young and had seriously strained his heart on Kangchenjunga in 1931, there was absolutely no doubt that he was the man best fitted to undertake this exacting task. His gallant effort to excavate his dead comrades the year before had won widespread admiration and he set out on his last attempt to conquer Nanga Parbat with the fullest support of the German and British authorities. He was unable to use the " Gilgit Road " for his approach as, once again, another expedition had already been sanctioned for that year, but the military authorities were sufficiently sympathetic to send two hundred labourers to put the mountain-track from the Kaghan valley across the Babusar Pass to the Indus gorge into commission. All subsequent expeditions were to follow this western approach.

With Bauer were Merkl's old friend Bechtold, now on the mountain for the fourth time, and Uli Luft, the sole survivor of the 1937 team. Newcomers were Schmaderer who had been on the Twins East Ridge in 1937, Zuck, Rebitsch, Ruths and von Chlingensperg. For the first time in the history of Himalayan climbing it was planned that loads for the higher camps should be dropped from the air. The great expanse of the Silver Plateau was thought to offer a good field for this experiment, but as there were inevitably still some doubts about the effectiveness of an airborne transport service, double supplies were taken along.

Special care was given to the selection of radio equipment and to the organization of a dependable weather report service. Every member of the team was capable of reaching the high camps, which meant that there would be a large reserve from which the summit pair could be chosen. The British Everest Expedition of 1953 made use of the same strategy; the quality of the team was such that each member had the ability as well as the desire to get to the top, but would at the same time be ready to serve the common enterprise in a less exalted role. In one direction, however, Bauer suffered severe frustration. The seasoned Sherpas refused to have anything to do with the expedition; fear of the mountain, even in those stout hearts, was too strong. There was hardly a Sherpa family which could not count a close relative among the dead. Eventually a few young and inexperienced Sherpas and Bhutias came forward. Their morale was not good, but who could blame them? Even Bechtold confessed that he and Bauer and their comrades were unable to approach Nanga Parbat with the old freedom of spirit.

Time was running short. It was already June when the build-up on the mountain began. In spite of snow storms which repeatedly interrupted the smooth flow of supplies, camps were pushed up the Rakhiot glacier, and the assault base (Camp IV), this time on the 1932 and 1934 site, away from the spot where the avalanche had buried the 1937 team, was not established until 24th June. The further consolidation of the route was impeded by persistently bad weather. July was more than half over before Camp V, near Rakhiot Peak, could be established. It was a thoroughly disheartening start.

Bauer was "obsessed", as he said later, with the thought that both the route through the *Mulde* and the alternative traverse of the Rakhiot Ice-wall must be avoided. In the conditions then prevailing the one offered the ugly threat of avalanches and the other was probably impassable for the inexperienced porters. He wanted to strike half-way between the upper and lower variants of the route: to him it seemed possible to ascend gently from Camp V and to traverse the foot of Rakhiot Peak underneath the not very prominent north-west buttress of the Peak and to enter the *Mulde* higher up where snow conditions had usually been quite favourable.

During the first reconnaissance of the new route the advance party discovered the body of a Sherpa porter hanging on weather-beaten ropes head downwards on the Rakhiot Ice-wall. It was Pinju Norbu who had perished during the disastrous retreat of the Willy Merkl Expedition in 1934. It appeared that, having come to the end of his strength, he had belayed himself in the hope of being rescued later. His kindly features had been miraculously preserved during his four years' exposure. It was a sad and gruesome discovery. The porters were sent back immediately. Luft and Zuck gently untied the dead man and brought the body down to the glacier. When it was lowered into a crevasse, a cloud of ice dust rose up. The work of the day was over and the climbers returned in silence to the camp.

Bauer's new route was found to be feasible. Instead of having to brave the storm on the exposed flanks of Rakhiot Peak above, the party was able to move in the shelter of the Peak. The traverse to the northern rock spur was secured for the porters by fixing wooden poles and ropes. As they drew nearer to the most critical spot around the rock spur the ice became dangerously brittle. Rebitsch slipped and checked his fall only by a desperate effort. His companion Ruths would never have been able to hold him on the steep slope which dropped thousands of feet down to Camp III on the lower part of the glacier.

When the whole party set foot on the East Arête and approached the slender crag of the Moor's Head, Bauer suddenly caught sight of something strange in the shelter of the rock. He reported: "Startled, I stood still. What I saw could only be the feet of dead men. My porter was thirty yards behind me on the rope, and immediately behind him was Zuck with a second porter. Was I to call the others to help me or keep them from the sight? I hesitated only for a moment; then I sent Zuck back with the porters with orders to pitch the camp at the beginning of the East Arête. No one was to come here except Luft and Bechtold.

"Soon afterwards the three of us stood before the two bodies and even before we had freed them from the snow we knew that Merkl, the friend of Bechtold's youth, lay before us. We had no time to pause and think. The two bodies were perfectly preserved—Willy Merkl and the porter Gay-Lay, the servant who had remained faithful to his master to the last and even in death had not forsaken him. Of the wealth of equipment they had carried up to the Silver Saddle they had saved nothing but a blanket and a piece of foam-rubber."*

They had neither rucksack, nor ropes. Everything pointed to the fact that Merkl had died before Gay-Lay. In Merkl's breast pocket they found that moving letter, already quoted, which Welzenbach and Merkl had written at Camp VII on 12th July.

Until this moment no one had realized that Merkl had nearly reached Camp VI at the foot of Rakhiot Peak. His comrades had believed that he had died in the ice cave in the dip of the Arête, three to four hundred yards before the Moor's Head. Evidently, by a superhuman effort, he and Gay-Lay had dragged themselves up the incline and clinging fast to the rock had sought shelter from the gale on the north-east side of the Moor's Head. Overcome by cold and weakness they had fallen asleep, never to wake again.

Bauer continues his poignant account: "We buried them both as well as we could and returned to our porters. This unexpected encounter with the dead had made a deep impression on us all, in spite of the austerity of purpose with which we had armed ourselves for the assault on Nanga Parbat. We looked anxiously at our porters, wondering if they would hold out, and though we had prevented them from seeing the dead, I knew that instinct is too powerful with these children of nature for them not to sense so strange a happening. In Darjeeling they had been scared by gruesome tales, and all our care could not prevent the consequences. In all the days that followed, we had, above Camp IV, only one porter left who was capable of work."*

Through the failure of the porters, which grimly recalled the trouble which paralysed the first German-American Expedition of 1932, the climbers' efforts to gain the Silver

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*Himalayan Journal, *Vol. XI.*

Saddle and with it the entrance to the summit massif were crippled from the start. The weather continued bad. Snow storms repelled two advances towards the *Schaumrolle* on the further side of the East Arête. On 25th July Schmaderer and Luft made the last attempt. No porter was available, so Rebitsch and Ruths followed with the loads. Again it snowed, and before they reached the *Schaumrolle* a thunderstorm broke, a most unusual phenomenon at that altitude. The effects of the lightning were most disconcerting. Luft suddenly felt a heavy blow on the back of his head and Schmaderer felt something like a lighted cigarette passing across his eye-balls. They had to beat a hasty retreat towards Camp VI.

The next day the weather looked a little more promising, but the climbers saw a red parachute spread out in the valley below, the pre-arranged signal that they should descend at once. The weather cleared a little towards the end of July and a small party of climbers and porters set out at once for the high camps. But enormous masses of snow and recurrent snow storms drove them back. At the beginning of August, Bauer had to acknowledge defeat.

After all the desperate hard work and terrible loss of life in the years between, the expedition of 1938 had not got much further than that of 1932, and this in spite of the fact that it had great resources of knowledge and experience to draw upon, was better equipped than any of its predecessors and was led by Germany's greatest Himalayan expert. All these great advantages could not offset the effects of porter trouble and persistent bad weather. But Bauer's sound leadership had ensured that this time the team would return intact. After all the tragedy of the preceding years this in itself was a source of satisfaction.

CHAPTER VII

The Reconnaissance of 1939

BAUER SEEMS to have recognized that the Rakhiot route was excessively long. Because of the unreliable weather of the region, the attenuated supply lines were in constant danger of being disrupted and the high camps cut off as in 1934. So Bauer decided to seek a shorter route. Once more the Diamir West Face came up for consideration. The very steepness of this route which had for so long acted as a deterrent, now commended itself as offering the shortest possible ascent.

Bauer lost no time. The clouds of war were already gathering when, in the following year, 1939, he entrusted a small crack team of climbers with the task of reconnoitring the famous Mummery Route and other alternative routes up the Diamir Face. The team was lead by Peter Aufschnaiter who had been with Bauer on both the 1929 and 1931 Kangchenjunga expeditions and was still a climber of the highest distinction. He was accompanied by three brilliant young men: Hans Lobenhoffer, Ludwig Chicken and Heinrich Harrer, who later won international fame through his exploits in Tibet. Again no experienced Sherpas were forthcoming and the climbers had to make do with what porters they could get.

The party approached the mountain along the new route across the Babusar Pass, used in the previous year, which led them directly to the western flank. They built a stone hut in the local style on the northern bank of the Diamir glacier as their headquarters. From there it was only three miles to the summit compared with nine miles from the former Camp I in the Rakhiot valley.

The climbers first went up the opposite side of the valley towards Ganalo Ridge to gain a fuller view of the immense wall of rock and ice which they were to tackle. Aufschnaiter considered three possibilities. The first was the Mummery Route in the direct line of the summit along the three rock ribs dividing the Diamir Ice-fall. The second possible route followed the Diama glacier to the Diama gaps and gained the north-north-west ridge leading on to the North Summit. This would have meant traversing the upper reaches of the Diama glacier, deeply embedded between the Nanga Parbat north face and the south face of Ganalo Peak, where avalanches continually fell from both sides.

The third possibility was one which Mummery had never considered. This route kept to the left of the Diamir Ice-fall on a more compact series of rock ribs pointing to the North Summit. From the vantage point of Ganalo Ridge, the gigantic wall of Nanga Parbat looked sheer and smooth, its rocky ribs standing out only in slight relief from the near-vertical plane of the enormous face. Those parts which were free of glaciation consisted of shallow gullies and steep *névé* slopes alternating monotonously. The view was austere and forbidding.

On 13th June the youngsters Chicken and Lobenhoffer followed Mummery's ascent route along the three ribs of the Diamir Ice-fall. It was then that they found on the historical camp site on top of the second rib that small log of wood which had lain there undisturbed for half a century. They returned the same day to their camp at the foot of the ice-fall. They did not like the route. The upper glacier below the summit broke off abruptly above the ribs and they had the awe-inspiring experience of seeing a gigantic avalanche sweep the entire amphitheatre of the Diamir Ice-fall, taking in its stride the second rib and the prospective camp site. This was emphatically not a route over which a responsible leader could take relays of climbers and porters. It had to be abandoned for good.

Only the third possibility was left. The approach to the foot of this route took the party below several hanging glaciers whose snouts protruded threateningly from their gullies. Camp II had to be established in these uncomfortable surroundings. Camp

III in the lower reaches of the Diama glacier was pleasant in comparison; it lay 18,000 feet high opposite the "central rib" in the rock and snow slopes dropping from the North Summit. In the middle of June Aufschnaiter and Harrer started off. They worked up through a system of couloirs to a broad steep snow slope, the lower part of which consisted of hard frozen snow; the upper part was bare ice. From the top of this slope they crossed the rock rib to the right. Here the stone was extremely brittle and broke at the slightest touch; stones hailed continuously from above. The Bhutia porters complained bitterly about the difficulty and danger. The party had to return.

The rib ends below an ice-wall which has to be negotiated until a platform or "pulpit" is reached. Once arrived there the main difficulties of the route are overcome and snow slopes lead towards the North Summit and the Bazhin Gap where the route converges with the Mummery Route and that coming from the Rakhiot valley across the Silver Plateau taken by Hermann Buhl.

Aufschnaiter and Harrer on their first assault pushed up only to a height of about 20,000 feet without pursuing the central rib to the foot of the ice-wall. Aufschnaiter, however, felt convinced that the route was practicable.

Returning to their stone hut some time later they found their food and fuel depots empty; in their absence they had been plundered by the notorious Chilas tribesmen. Conditions on the mountain had deteriorated. The ice was mostly bare of snow and the danger of falling stones had increased. In mid-July, one month after the first attempt by Harrer and Aufschnaiter, Camps I, II and III were again established. The porters refused to proceed any further, and one can hardly blame them. Aufschnaiter and Chicken also returned and only the indomitable Harrer and Lobenhoffer continued the ascent. Harrer was reminded of the worst parts in the Eiger North Wall, Lobenhoffer of those of the Brenva flank of Mont Blanc. They made their way up over sheer ice and treacherous rock in ten hours of exacting climbing and at last reached the very top of the central rib below the "pulpit" of the ice-wall at about 21,000 feet. They pitched their small tent while stones kept whistling over their heads. A month before stone falls had occurred mainly in the afternoons; now they were happening indiscriminately. The climbers descended the next day.

In spite of the extreme technical difficulty Aufschnaiter concluded that the route would be possible in early summer before the danger of stone falls had grown too great. As it seemed unlikely that any porters could be persuaded to venture on this route, a team of at least seven climbers would be necessary to support an assault.

The Himalaya Foundation was informed accordingly and in due course a letter arrived conveying the decision that in the following year (1940) a full-scale expedition would be launched up the short Diamir route.

On 23rd July Aufschnaiter and Chicken made a first ascent of the western summit of Ganalo Peak (22,370 feet) soaring above the Indus gorge 18,000 feet below. Chicken said that it offered the most imposing view he had ever had. To the south he could overlook both the Diamir Face and the Rakhiot glacier with Nanga Parbat and her eastern satellites towering above the vast amphitheatre of the Rakhiot glacier and its tributaries. The narrow, deeply incised Diamir valley to the right of the north-north-west ridge compared strangely with the broad expanse of the Rakhiot glacier to its left. In the Diamir valley one felt imprisoned in a ravine of ice, hemmed in between walls 10,000 to 12,000 feet high. Beside the crushing austerity of this valley, the wide open many-tiered Rakhiot glacier imparted a feeling of "enthusiastic joy".

September 1939 was now at hand and on reaching Karachi the climbers were interned. Harrer managed to escape into Tibet where he was to become the friend and tutor of the young Dalai Lama. Schmaderer, who had been climbing that year in Sikkim, was, on a similar bid for freedom, killed by Himalayan robbers.

Dreams of Nanga Parbat were lost in the chaos of the Second World War.

CHAPTER VIII

The Winter Escapade of 1950

NANGA PARBAT was still to snatch two more human lives. Three young Englishmen, Crace, Thornley and Marsh, brought together while soldiering in India, decided on demobilization to return there to explore the barren territory in the northern parts of the Karakoram, which are visited only by primitive nomads and belong to the least known regions of the world. But official permission to visit the region was suddenly withdrawn for fear of political incidents. The three enterprising men, thwarted in their romantic project, resolved instead to go to Nanga Parbat which at that late time of the year—it was November 1950—had never been visited by climbers. Their tent, equipment and clothing were designed to stand the severe conditions of a winter in the Karakoram and could serve them just as well on the glaciers of Nanga Parbat. Their official purpose was to explore winter temperatures and snow and avalanche conditions on the upper glaciers, but there is little doubt that the scientific aims were subordinate to a sheer love of adventure.

On 11th November they set up their Base Camp at 12,500 feet. The Sherpa porters, the famous Tensing among them, remembering relatives who had died on this mountain of evil name, refused to carry beyond Camp I. The young men decided to push on on their own. Setting up their tents on the higher glacier they spent the evenings reciting Shakespeare and making music to the accompaniment of the howling gales outside. But this exhilaration of the spirit could not prevail against the overwhelming forces of nature. Marsh contracted frost-bite and had to descend to Base Camp. On 1st December he saw his comrades move up the glacier from their last camp at 18,000 feet; he saw them stop and pitch their tent. But though the next three days remained fine, he saw no further sign of movement. Then a blizzard obscured the view. When the sky cleared again the tent had been swept away, probably carried down by an avalanche. An aerial photograph published at the time marks the scene of their disappearance far to the right of the normal Rakhiot route, nearer to the enormous amphitheatre of the *Mulde* which even in summer receives all the avalanches falling from the East Arête and the hanging glaciers of the Silver Plateau.

Marsh at once set out to find his friends. The Sherpas lived up to their great tradition by accompanying him without a moment's hesitation. In a temperature of 40° C below zero they progressed at a rate of only 150 feet an hour and finally reached Camp I. Continuing at this rate it would have taken them a week to reach the spot where Crace and Thornley had last been seen. By that time they would have succumbed to frost-bite and there would have been no hope of return. In the light of previous experience it is obvious that the two young men would have been lost even without the intervention of sudden disaster. They had put themselves beyond the reach of outside help. Marsh mobilized the help of the Pakistani government and was given the opportunity of scouting the region from an aeroplane. But no trace was visible on the vast glacier which had devoured so many lives and this time had been offered such easy prey. The death roll of Nanga Parbat now stood at fourteen climbers and seventeen porters.

CHAPTER IX

Erwin Schneider's Summing Up

IN PROFESSOR DYRENFURTH'S distinguished book on the Himalaya, *Zum Dritten Pol,* Erwin Schneider who in 1934 climbed with Peter Aschenbrenner to within 900 feet of the summit of Nanga Parbat and with him survived the storm which trapped Merkl, Wieland, Welzenbach and their Sherpas, says: "In 1895 Mummery thought that victory was at hand and that he could have reached the summit on the following day. We know now that he had not the slightest chance of doing so notwithstanding his prowess and his speed. One climber assisted by only two porters is no match for a 26,000 foot peak.

"In 1932 Merkl found the admittedly long but technically easiest route from the Rakhiot valley. The failure of his expedition to reach the summit can be attributed to a variety of causes. First, none of the climbers had Himalayan experience. Secondly, there was constant trouble with the porters and experience has suggested that the local Baltis and Hunzas are unsuited to high altitude work. Finally, and this was the deciding factor, the ascent was begun much too late in the year, i.e., on 30th June, for the monsoon reaches the western Himalaya usually by the first week in July. The expedition of 1932 was fortunate in that the monsoon that year did not reach Nanga Parbat until 18th July and until then exceptionally favourable conditions had obtained. The attempts made after 18th July and which dragged on to the end of August were sheer waste of time and effort.

"In 1934 the auguries were good. The weather was tolerable and by 7th June the climbers were already installed in Camp IV. On 8th June Drexel died in Camp II. This set the expedition back by seventeen days and it was not until 25th June that Camp IV was again occupied. Even then the pace was not quickened and there was no evidence of a feeling of urgency. It was not until 4th July that the actual assault on the summit started from Camp V. Then, too many of the climbers wanted to continue summit-wards at the same time; first there were seven in the assault party, then six, and from Camp VII onwards there were still five. This involved far too heavy an expenditure of transport and equipment. It would have been more reasonable to advance from Camp VI in groups of two and if this had been done the summit might still have been reached. Even from Camp VI onwards far too much time was lost unnecessarily. The mountain was underestimated with a casualness bordering on irresponsibility, until in the end, on the eve of imminent victory, the storm put an end to every possibility of success.

"It is not possible to explain in a fully satisfactory manner why Merkl, Welzenbach and Wieland did not keep up with the advance group (Aschenbrenner and Schneider) and broke down after only two hours, still above Camp VII. It is most probably attributable to the fact that without an artificial supply of oxygen it is not possible to stay above 24,500 feet for more than a short time without losing efficiency. At the same time it is known that the use of oxygen equipment has certain other drawbacks. Given unfavourable weather conditions deterioration at high altitudes proceeds with great rapidity and all strength evaporates. While resting one feels strong and well, but at the smallest effort every movement has to be forced on the body and every step becomes an effort of will.

"In 1937 the climbers made an early start and achieved Camp IV in spite of adverse weather conditions. But they pitched this camp, which should have been the safest of them all, in the wrong spot. It was particularly tragic that they should have made this mistake as there was an area of several square miles in which they could have chosen a perfectly safe site. In view of the impossibility of finding a camping site similarly safe from avalanches between Camps I and IV they may have underestimated the sinister significance of the inconspicuous ice-fall on the Rakhiot flank which caused the disaster.

"In 1938 after the terrible toll of the years 1934 and 1937 Bauer's chief concern was to return without loss of life. He did not want to, nor could he, take any risks. Moreover, his expedition was pursued by ill-luck, especially as regards weather. Admittedly the assault on the summit started far too late, at a time indeed when the first monsoon winds had already swept over the mountains. And once the monsoon had begun there was no longer any prospect of success, having regard to Bauer's quite understandably cautious method of attack.

"The expedition of 1939 was undertaken purely for reconnaissance purposes and that of 1950 can be regarded only as the eccentric adventure of inexperienced amateurs. At best one can admire their courage."

BOOK TWO

Official Report of the Willy Merkl Memorial Expedition, 1953, by Karl Herrligkoffer*

TRIUMPH

Prelude to Action

Munich to Gilgit

The Approach

The First Assault

The Turning Point

The Summit

The Return

The Aftermath

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*With additional material from the dispatches from the Mountain (*Berichte* I-VII) and other sources (See bibliographical note p. 248).

CHAPTER I

Prelude to Action

I WAS JUST seventeen when, in July 1934, Willy Merkl, who was my step-brother, met his death on Nanga Parbat. I had at the time no conception of what it must have meant to battle against death, famished and frozen, for ten whole days and nights on end and then, finally, to have to succumb. I was saddened, naturally, for I had lost my big brother, my hero, but it was not until 1937 when, at one blow, seven more of my countrymen, all renowned climbers, together with their faithful Sherpas, lost their lives on Nanga Parbat, that I felt the full impact of the tragedy associated with the mountain.

I determined, there and then, that come what may, I would myself organize a new German Himalayan expedition, whose task it would be to set the seal of victory upon the heroic efforts of our dead comrades, to fulfil, in fact, a sacred trust.

The idea grew and took shape. Over a period of years I studied the entire literature on the Himalaya, concentrating of course on Nanga Parbat, and wrote meanwhile a book on Willy Merkl as mountaineer, dedicated to his memory. Then came the Second World War and for many years all prospect of organizing a new German expedition to Nanga Parbat perforce receded. It was indeed not until five years after the cessation of hostilities that German thoughts turned once more to the Himalayas. Rudolf Peters, who had made the first ascent of the south-east wall of the Schüsselkar and the north face of the Grandes Jorasses, took the initiative. He gained the support of the German Alpine Club but was frustrated in other directions. At this time I became a member of the German Himalaya Society but could find no support for my project. And so, in autumn 1951, that is eighteen months before the start of our expedition, I had to begin fighting for my idea and embark upon a campaign in its support which lasted literally till the hour of our departure on 17th April, 1953. I was not disposed to be deterred by these initial difficulties and went straight ahead with my plans.

My first step was the formation of the Council for the German Himalayan Expedition 1953. Members of the Medical Faculty of the University of Munich, among them Professor Frey and Rector of the University, Professor Schmaus, by agreeing so readily to sit on the Council, encouraged me to approach other eminent personalities. Prominent men in the political and economic life of Bavaria also consented to accept membership, and the committee of the Munich branch of the German Alpine Club joined us as a body. I was fortunate in persuading Herr Thomas Wimmer, Chief Burgomaster of Munich, to accept the honorary patronage and received from him the staunchest possible support. Herr Wimmer took it upon himself to try again and again to win over the National Committee of the German Alpine Club but without success. A scheme for a "working affiliation", brought into being after much effort, was again dissolved. We had further to contend with an unfortunate press campaign which seriously jeopardized the launching of the expedition. However, by means of a detailed submission of all relevant facts, I secured the good will of the Home Office and Foreign Office in Bonn and, fortified by the unfailing loyalty of the honorary patron of the expedition, I went ahead with quiet confidence.

An expedition to the Himalaya costs a great deal of money. Equipment, transport and insurance can account for a sum well in excess of £20,000. Almost all the material requirements for our expedition were covered by the generosity of German industrial and commercial undertakings, but Austrian, Spanish and Swedish firms also contributed. In this way the total expenditure was reduced to half of the original estimate. Even so, the balance still required for ship and air travel and in particular for porters' wages represented a formidable sum, and

I am happy to be able to say that half of this amount was met by small contributions from supporters of our plan in Germany. Subscriptions from members of the Munich Branch of the German Alpine Club produced a remarkable result but apart from that one branch and the Austrian Alpine Club, no other organization or official body shared in the financial backing of the first post-war German expedition to the Himalaya, and the considerable balance still required was met by contracts covering literary, photographic and film rights, on account of which generous advance payments were made.

In planning the selection of the team the original idea was to include, apart from the climbers, a group of scientists. Dr. Krasser, a geologist of Bregenz, and Dr. Reuss, a geodetist of Lindau, had already been induced to take part in the expedition when it became clear that the inclusion of this scientific contingent would be financially impossible. For it must be recorded that scientific bodies with funds at their disposal proved utterly unresponsive to our appeal.

Our first step in building up the climbing team was to approach Peter Aschenbrenner, alpine guide of Kufstein, already known for his exploits on Nanga Parbat and as friend and comrade of my brother Willy Merkl. He was appointed leader of the climbing team. He had been with the Nanga Parbat expeditions of 1932 and 1934 and, in the company of Erwin Schneider, had climbed to within 900 feet of the summit.

The Munich Branch of the German Alpine Club recommended three members of their junior section—Herbert Eschner, 29, neophilologist; Hermann Köllensperger, 27, mechanic; and Otto Kempter, a 27-year-old businessman, who became our financial expert and willingly assumed the thankless task of Camp Treasurer. All three were Munich men and had impressive mountaineering records. Unfortunately Herbert Eschner, having done valuable spadework for the expedition, had to drop out at the last moment. He had, among other things, made himself responsible for negotiations in Karachi and Rawalpindi—no easy task—and for engaging the Sherpa porters in Darjeeling, but leave of absence from his official duties was withheld until the very eve of our departure.

We further agreed on the participation of Dr. Walter Frauenberger, a 45-year-old magistrate from St. Johann in Pongau, Austria; he had an extraordinarily wide experience of alpine work and had in 1938 made first ascents of three 20,000 ft. Himalayan peaks. At Base Camp he was elected deputy leader of the expedition.

At the request of the Austrian Alpine Club the 29-year-old Innsbruck climber, Hermann Buhl, was also included. He had won fame as a solo-climber and could produce a climbing record which could only be described as fantastic. His inclusion in the team was objected to by some of his Tyrolese colleagues, but his unquestionably unique position among all German and Austrian climbers fully justified the decision to retain him.

Albert Bitterling, a mountain guide from Berchtesgaden, had considerable experience in the Western Alps and had had valuable meteorological training; he was another in his early forties. He joined the team with Kuno Rainer, a 38-year-old foreman bricklayer and mountain guide of Innsbruck. Rainer had partnered Buhl on the Eiger North Wall, the North Wall of the Western "Zinne" (Dolomites), the Aiguilles de Chamonix and the Marmolata South-West Wall, of which they made the first winter ascent. The two of them were known as the most formidable climbing combination in the Eastern Alps. Rainer himself was a modest, straightforward type of man and proved an exemplary comrade on the mountain.

Hans Ertl, whose reputation as climber and mountain photographer is international, joined the team as camera-man. Also in his middle forties he could, like Frauenberger, claim Himalayan experience; he had also climbed in the Andes and in Greenland.

Finally, another Munich man, my companion on many mountain trips, Fritz Aumann, was appointed Camp Commandant and made responsible for the successful working of our radio apparatus. He was later relieved by Rudolf Rott, an unexpected addition to our company, and alone negotiated the Rakhiot Ice-wall to the Moor's Head (23,000 feet).

For my part, having organized the expedition, I was to accompany it as physician.

This then was our team when we left Munich on 17th April, 1953:

Karl Herrligkoffer, *organizer and expedition doctor*
Peter Aschenbrenner, *leader*
Walter Frauenberger, *deputy leader*
Fritz Aumann, *camp commandant and engineer*
Hans Ertl, *photographer*
Albert Bitterling, *meteorologist*
Otto Kempter, *treasurer*
Kuno Rainer
Hermann Köllensperger
Hermann Buhl

CHAPTER II

Munich to Gilgit

THE DEPARTURE of the expedition was scheduled for noon on 17th April, 1953, from Munich Main Station, where we had a rousing send-off. There had been a host of things to attend to at the last moment and when eventually seven of us (Aumann, Ertl, Kollensperger, Kempter, Bitterling, Buhl and I) piled into the Alpine Express only one minute before departure time, we could hardly believe that we were at last on our way to Nanga Parbat. Only at noon on the previous day had we had word from the Pakistan Legation at Godesberg that our visas had been granted. This was entirely due to the good offices of our friend Dr. Ullrich who had finally handed us the documents in person. The passports had been stamped with the necessary transit visas for Austria and Italy just half an hour before we left Munich and then, and only then, was the way clear for the departure of the Willy Merkl Memorial Expedition.

But now all the frustrations and difficulties of the past month were behind us and we thought with gratitude of the Chief Burgomaster of Munich, Herr Thomas Wimmer, of the Munich Branch of the German Alpine Club, of their president, L. Aschenbrenner and of Herr O. Raab, Legal Adviser to the German Alpine Club, all of whom had done so much to make this day possible for us. Suspense was at an end and we were all in a great state of exhilaration.

Time flew by and soon we were stopping at Kufstein. Here Peter Aschenbrenner was to join us and travel with us as far as Innsbruck. (He was to follow us to Pakistan by 'plane two or three weeks later.) We stood on the platform with him and his friends who drank to our success in Tyrolese red wine. Then on our way again, up the valley of the Inn. At Innsbruck we were greeted by a crowd of friends almost as great as that which had marked our departure from Munich. Our friends of the Austrian Alpine Club were there, including Erwin Schneider, veteran of the 1934 Nanga Parbat expedition, his typical climber's face deeply tanned, who said as he shook my hand, "You'll make it". I could imagine no better send-off than this, from the doyen of Austrian mountaineers.

Peter Aschenbrenner left us here and Walter Frauenberger and Kuno Rainer joined us to make up the full complement. We were now headed for the Brenner Pass and got through the Austrian-Italian customs without a hitch. On through orchards in blossom, until in the evening sun the snowy peaks of the Vajolet Towers of the Dolomites sent their last greetings towards us down the Eisack valley.

We reached Genoa at 4 a.m. on the 18th and were met there by a pilot of the Lloyd-Triestino Navigation Company. He had with him some press photographers who pursued us the whole day like bloodhounds. At noon we boarded the shining new Lloyd-Triestino 18,000 ton motor vessel *Victoria*. The name seemed a happy omen and we welcomed the prospect of our ten days at sea. While the porters were stowing away our luggage we looked over our sleeping quarters. Walter Frauenberger and I shared one stateroom which was connected by a bathroom with the cabin shared by Aumann, Bitterling and Ertl. The others (Buhl, Kempter, Köllensperger and Rainer) were accommodated in a four-berth cabin further along the deck. We were all in excellent spirits and feeling absurdly happy as we unpacked.

Our baggage had not yet arrived so that the last hours before sailing were not without anxiety. But at last my name was called and I could check the incoming trunks, crates and bags with an easy mind. Officers of the Italian Alpine Club and with them Countess del'Oro-Previdale, patroness of Italian mountaineering, came aboard to offer us their good wishes. Toasts to our success alternated with requests for autographs. When it was time for our Italian friends to leave ship the Countess on impulse planted a motherly kiss on the cheek of her favourite, Hermann Buhl.

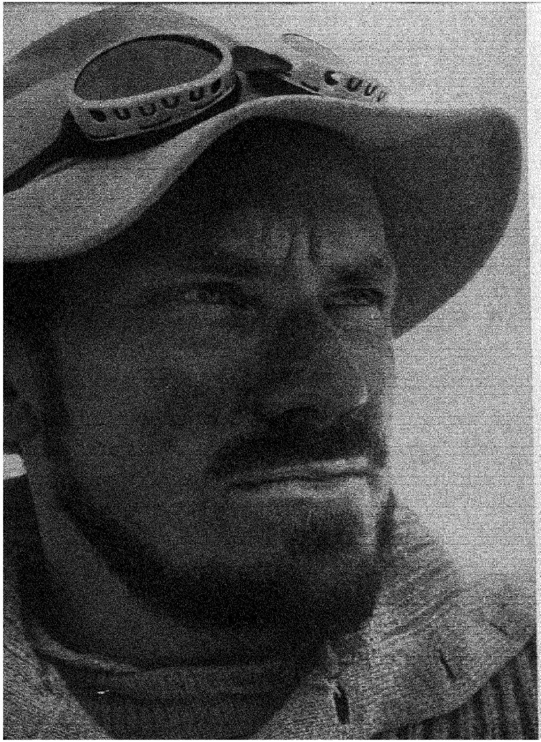
At 2.14 p.m. the *Victoria* slipped her cables and we were off on our voyage through the Mediterranean. After all the frenzied activity of the past few weeks, most of us were content to spend these first leisurely hours of our voyage resting in the warm breeze and thinking of our far-away objective, to which every hour now was bringing us closer.

A few Italian reporters had followed us on board and they used the time between Genoa and Naples to collect information about the expedition. A broadcast for Naples was prepared at the same time. After discharging our various obligations to the press and radio, which for a change could be done in leisurely fashion over drinks in the ship's lounge, we took another stroll on deck before turning in.

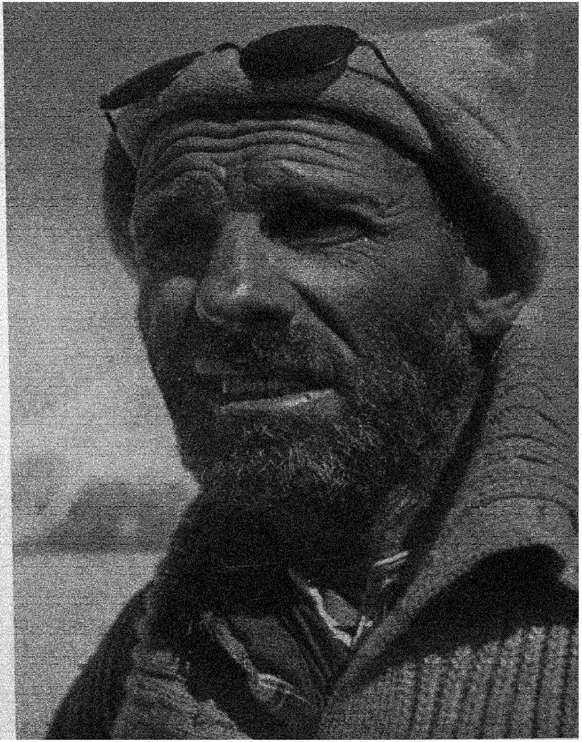
On Saturday, 19th April, we put in at Naples and grasped the opportunity to take a brief look at Pompeii. In the afternoon Hans Ertl and Fritz Aumann visited the dock area with their ciné cameras unaware that this was a prohibited military zone. They spent a whole hour under arrest before the matter was straightened out. At 9.30 in the evening we sailed on south-eastwards towards the Suez Canal.

Life on board offered many diversions—delectable meals, physical exercise, lessons in English and Urdu—and we were soon on excellent terms with the head waiter. He was an Italian who had lived some time in Vienna and therefore spoke our language and understood our tastes. He told me that a month previously the Swiss Dhaulagiri Expedition had travelled out to India on this same ship.

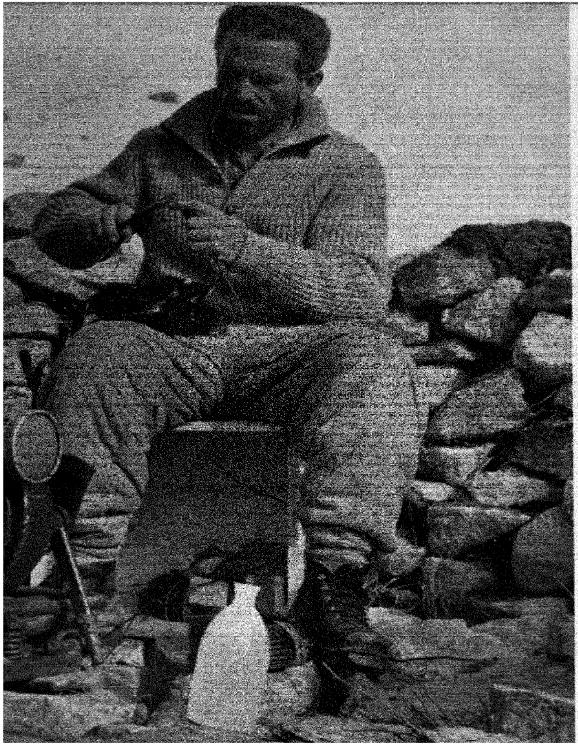
On the night of 22nd April we left Port Said after a brief time ashore and began to make our way slowly through the Suez Canal. Traffic here was congested and we had to ride at anchor until morning to allow passage to shipping approaching from the south. Meanwhile we watched the British and Egyptian tankers and gaily coloured sailing boats manned by fellaheen sailing across the mouth of the canal. Then at last our proud *Victoria* took the lead and, followed by a big American liner and a long procession of other shipping, continued on her way.



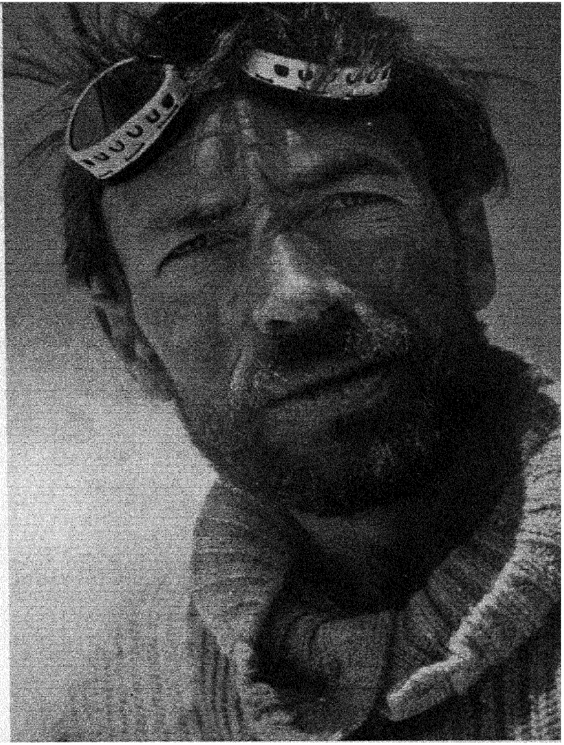
Dr. Karl M. Herrligkoffer, leader of the expedition



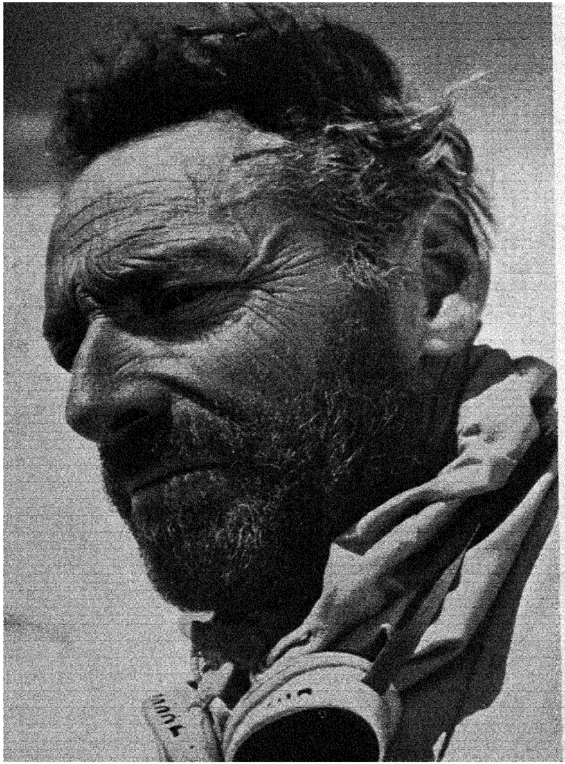
Peter Aschenbrenner, mountaineering chief of the expedition



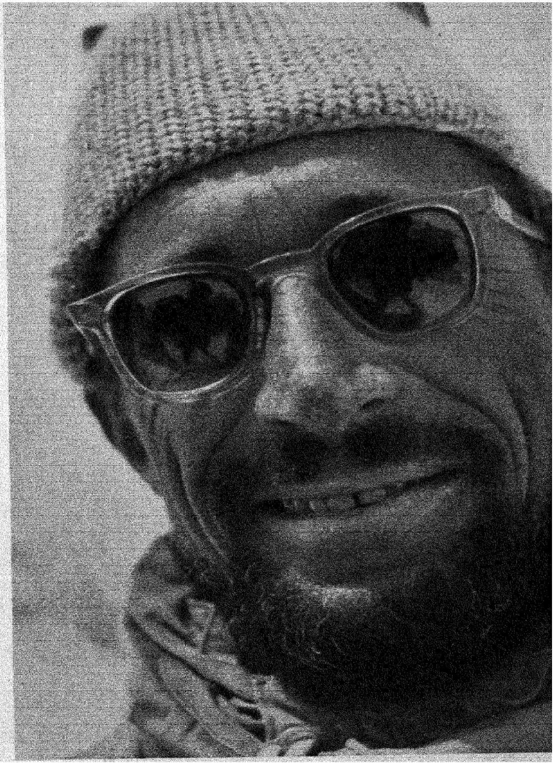
Aumann, Base Camp commandant, mending the electric generator



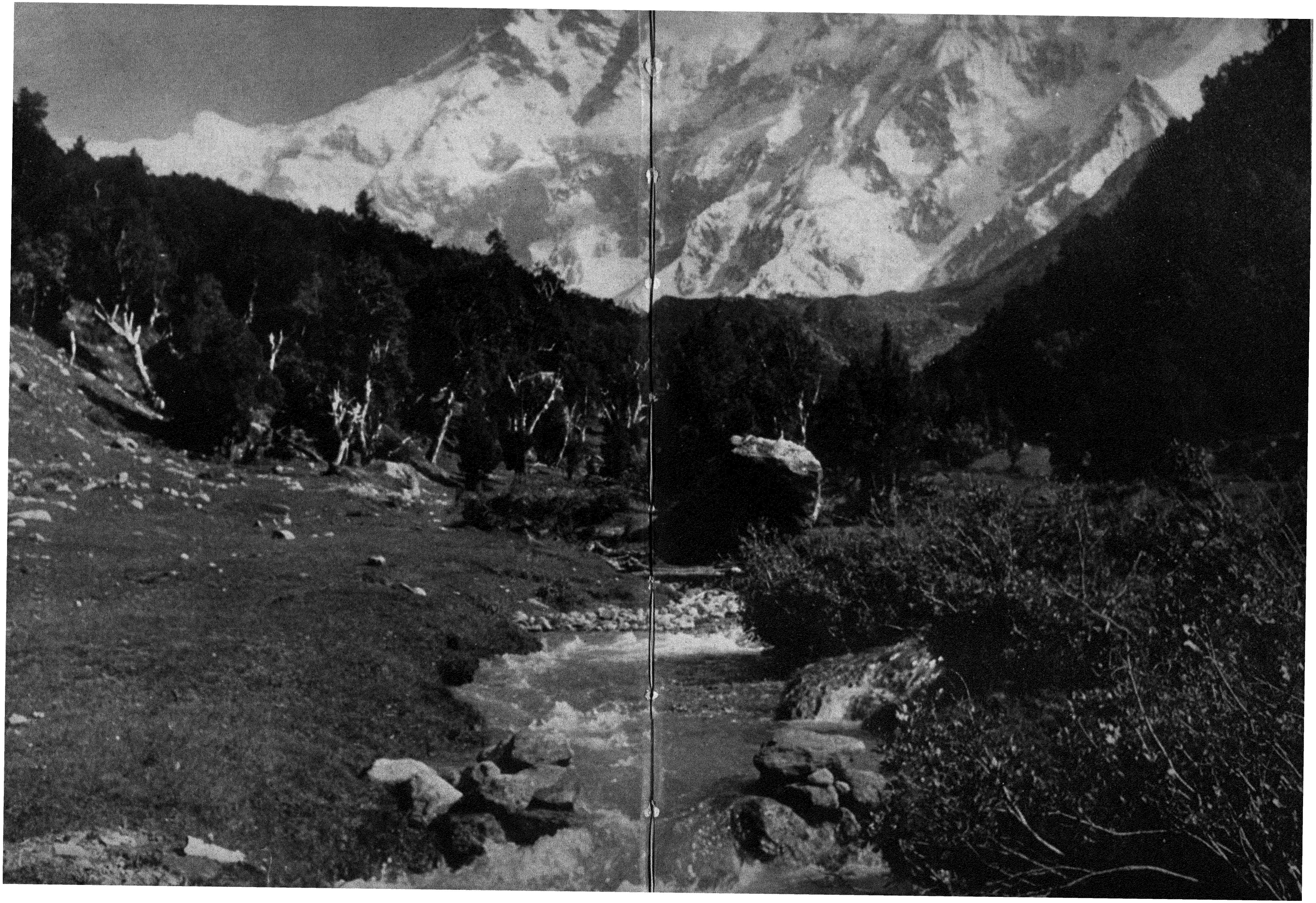
Dr. Walter Frauenberger, the deputy leader of the expedition



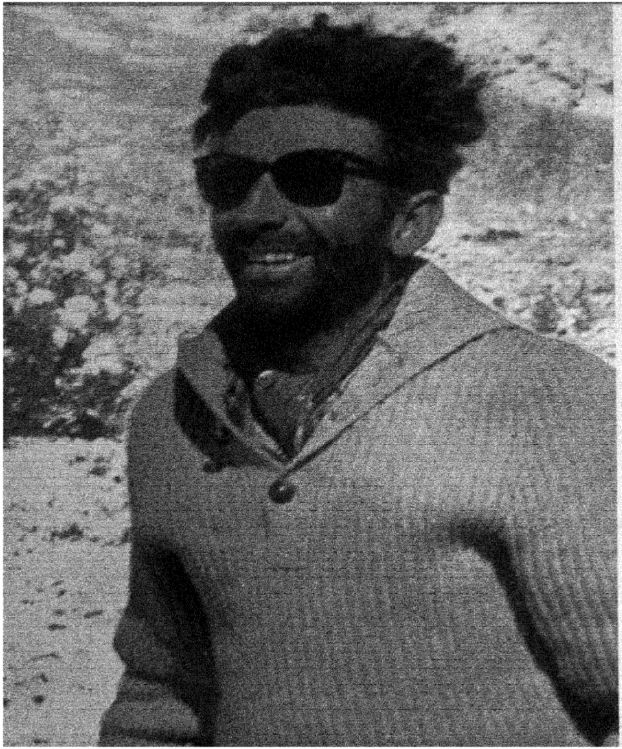
Hans Ertl, the photographer of the expedition



Albert Bitterling

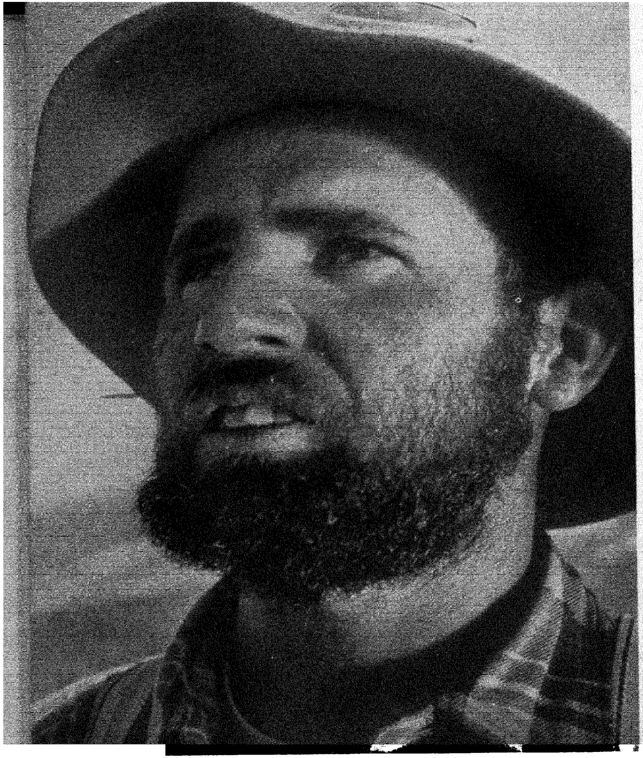


The site of the interim Base Camp in the **'Fairy Meadow'**



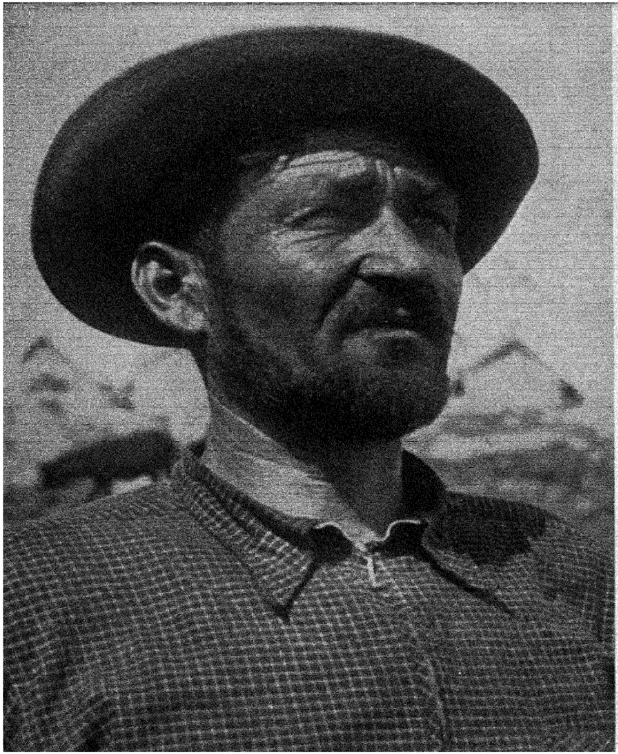
Hermann Buhl, who reached the summit

Kuno Rainer

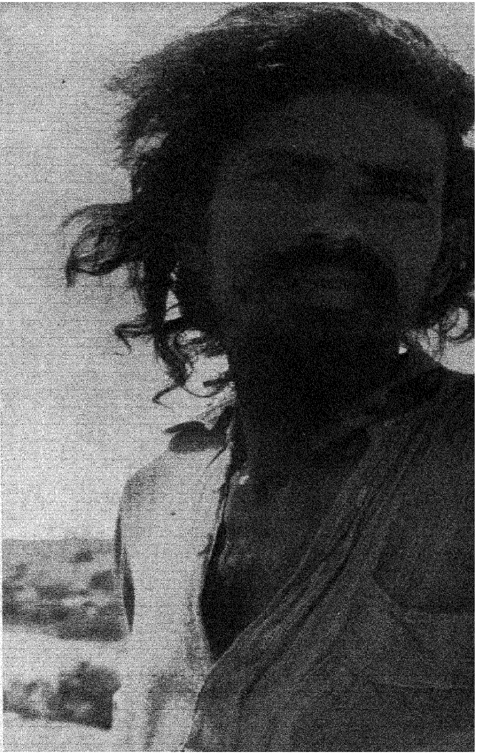


Hermann Köllensperger

Otto Kempter



Ali Madad, one of the best Hunza porters



A porter from Tato

To the west the barren landscape was broken by an occasional oasis and extensive British military encampments and airfields, in the distance the jagged outline of a mountain range, while to the east we could see only infinite unrelieved desert. Meanwhile the temperature was rising appreciably with humidity in the region of 96%, until we came to the hottest part of our voyage, the crossing of the Red Sea.

And so to Friday, 24th April. There was a dance on board but the night was as humid as the day and it was too hot for me to do more than watch. I made the round of the ship by moonlight and pondered that by the time the moon was again waxing we should be at Base Camp on Nanga Parbat.

The *Victoria*, with numerous little flying fish crowding round her bows, was now making her way to the outlet of the Red Sea and in the early afternoon of 26th April we reached Aden, where we were able to go ashore and indulge in a shopping spree. Everything here was cheaper by a third than in Port Said and we were interested to see on sale the most modern German cameras still unobtainable at home. We decided also to take a look at the periphery of the town—Rainer and Kempter particularly wanted to climb the rocks on the outskirts—but we found the native quarters squalid, poverty-stricken and even hostile.

The next morning found us in the Arabian Gulf and riding a rough sea. We were now nearing our destination and at 7 a.m. on Thursday, 30th April, we arrived at Karachi. The expedition was, of course, expected and all personal customs formalities and exchange matters were very quickly settled. Dr. Hussain of the Pakistan Ministry for Cultural Affairs came aboard to extend to us the good wishes of his country, and Dr. Schmidt-Horix welcomed us on behalf of the German Ambassador. Then followed interviews with the Pakistani and Indian press. It was obvious that our statement that we intended to fly the Pakistani flag on the summit of Nanga Parbat had made a great impression, for on the following day it had headlines in all the Karachi newspapers. This was probably because the summit of Nanga Parbat lies close to the cease-fire line dividing Kashmir into two parts and in territory contested by India and Pakistan.

for us a saving of about £1,000 and represented some useful spade work for the American expedition which was to set out for K2 (Chogori) in a few weeks' time.

Our shipping agent Mr. Wandres was immediately informed and was able to start re-loading at once, while Walter Frauenberger and Kuno Rainer went off to supervise operations. Then I accompanied Otto Kempter, our Treasurer, to the State Bank of Pakistan where we were to collect an affidavit to enable us to cash our draft at Lloyd's Bank.

On my return to the hotel in the early afternoon I found my companions in a great state of excitement. Hans Ertl greeted me with the news that the shipping agent had telephoned to say that freight charges to Rawalpindi would amount to 6,000 rupees. The prospect of having to meet freight charges equivalent to half the sum saved by customs exemption was far from encouraging, so I took a taxi straight away for the station. There I found my profusely perspiring comrades with Wandres and his men in conclave with the station-master. After a certain amount of argument I managed to get the freight charges reduced to just over 3,000 rupees on the basis that at least half of the consignment could be classified as perishable goods. This sum was later, by some surprising calculation, reduced to 1,660 rupees.

I now learned that there were still five pieces of baggage held up in the customs for want of clearance certificates. These pieces had been added by Aumann, Kempter and Buhl after the initial shipping formalities had been completed and they had therefore not been listed. This meant another visit to the customs officer while the others checked and supervised the loading, seeing that perishable foodstuffs and photographic materials were placed at the bottom of the goods wagon, for on its way north across the desert our supplies would be exposed to a murderous heat of 120-130°F.

Loading completed, the party returned to the hotel equipped with a few crates of beer and a case of salami, while I stayed behind to get the tickets to Rawalpindi. This procedure lasted a full two hours as the name of each passenger was written on three types of ticket and checked and rechecked. At last my

To implant the national flag on the highest point of Kashmir on ground never before trodden by man could not but fire public imagination.

We took leave of the friends we had made on board and went ashore where we had to wait a full two hours while the small luggage was examined. Peter Aschenbrenner's gun had to be unpacked, was examined closely and obviously caused a great deal of comment. But at last we were through and on our way by taxi to our hotel.

My first duty was to call at the German Embassy to present myself and to collect our mail. Dr. Schmidt-Horix requested that Herr Knips, Counsellor at the Embassy, be allowed to join the expedition during his four weeks' leave and this I readily agreed to.

I now had word that the customs authorities were demanding duty to the tune of 10,000 rupees. It was quite impossible for the expedition to meet an unforeseen expense of this magnitude and I decided at once to appeal to the Prime Minister, Mr. Mohammed Ali. We located him in a modest bungalow and were received by a secretary who listened attentively to our story and then requested that we make our application in writing.

That evening we were invited to a reception at the Dutch Embassy in honour of Queen Juliana's birthday. Mr. Mohammed Ali was to be among the guests, also Dr. Schmidt-Horix. As the party got under way I was introduced to many members of the Diplomatic Corps, both European and Asiatic, but to my great regret the Prime Minister of Pakistan, to whom I was hoping to be presented, had left the party after only fifteen minutes. However, I was reassured when Dr. Schmidt-Horix told me that he had had a word with him about our customs difficulties and had asked him for his assistance.

Among the many callers at our hotel on the following day was Rudolf Rott of Augsburg. Although he was without actual experience, Rott was a great Nanga Parbat enthusiast and had months before in Germany begged to be allowed to join the expedition. Having been refused he had hitch-hiked all the way to Karachi, where he had fallen seriously ill with a disorder of the liver and had been in hospital there for some weeks before our arrival. I was obliged to make it quite clear to him that I was no more in a position to sanction his joining the team in Karachi than I had been in Augsburg. Moreover, he was at present in no state of health to undergo such prolonged physical strain, and I had to inform the German Embassy accordingly. This was unfortunate as I knew that they would have liked us to take Rott with us to Base Camp as one could not but admire the determination of the fellow.

On Saturday, 2nd May, Bitterling and I called at the Meteorological Office to collect information about weather conditions on Nanga Parbat, the influence of the monsoon* and the autumn gales from the west. The monsoon usually reaches Nanga Parbat on 1st July but the western gales do not come until after 15th September. Everyone agreed that we had chosen a very favourable time. For the rest, the maps and surveys shown to us were already familiar. We asked if we could have weather reports daily at 7.30 a.m. over Radio Rawalpindi and suggested the following simple terms: clear, cloudy, overcast, snow, gale, monsoon. Thus any member of the expedition, even if he knew only very little English, would be able to receive the weather reports. We were assured that such a service would be made available to us.

At the Embassy I learned that we could fly from Rawalpindi to Gilgit at a cost of 65 rupees per man and 10,000 rupees for the baggage. This was a large sum but on the other hand this section of the approach would be reduced from ten days to one and a half flying hours. Furthermore, our equipment would probably suffer in the course of a jeep crossing of the Babusar Pass, even assuming that the pass was open at this time of year, which was doubtful.

I then called with Dr. Schmidt-Horix on the Secretary of State for Finance and received the cheering news that the Prime Minister had given permission for our expedition to pass through Pakistan duty free and had stated that this permission should apply to any future Himalayan expeditions. This meant impatience so got the better of me that I told the man behind the counter that in Munich tickets were issued at the rate of about 500 an hour. He was unimpressed and replied only that we weren't in Munich now, we were in Pakistan. I suppose I asked for it.

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* According to Prof. Flohn, it is likely that from a strictly scientific viewpoint the bad weather spells on Nanga Parbat are not caused by the monsoon, but by the influx of polar air.

It was now time to split into groups. The first group, Knips, Bitterling and I, would go ahead, travelling this evening at 8.50. The second group consisting of the four younger members (Buhl, Kempter, Köllensperger, Rainer) would go by the train conveying all our baggage, while the rest were to remain behind to clear the remainder of the luggage and would then leave Karachi on Monday evening at 5.20.

It was already 8 o'clock when I got back to the hotel after the protracted business of getting the tickets and there was just time for a drink and a quick change while Fritz helped to stuff my personal belongings into my suitcase. At the station hundreds of porters in red shirts were squatting about and three took charge of our luggage. Each of them balanced two huge cases on his head and gripped another piece of luggage in each hand, and with remarkable surefootedness ploughed a way through the seething station crowds of this Asiatic metropolis. People were squatting or lying in the most unlikely places and I almost stepped on a sleeping boy before eventually we found our names on an air-conditioned compartment. The luggage was stowed away, the porters received their baksheesh and soon the train was steaming out of the station.

Sunday, 3rd May, found us speeding over the 700 miles of barren country between Karachi and Lahore. The weather was magnificent. The further north we got the more steppe-like the character of the country; among the isolated shrubs and tall trees camels could be seen strutting with dignity, water buffalos lay crowded together up to their necks in the mire, and goats, vultures, ponies and donkeys enlivened the scene. All the natives wore white, or once-white, loin-cloths topped by a European-style jacket and brightly coloured turbans, as protection against the intense heat of the sun. As soon as one stepped from the air-conditioned compartment on to the platform one was struck, as it were, by heat from a furnace.

The outside temperature was 118°F. in the shade, a great contrast to the artificially cooled train. But notwithstanding the heat, every station platform at which we stopped was swarming with natives selling fat juicy melons, or little apples or cucumbers.

A few hundred miles before Lahore vegetation became more abundant and the density of the population increased. Villages of flat wattle huts occurred more frequently and became more extensive. Here the beneficial results of the British-installed irrigation scheme, diverting the waters of the Indus to the barren countryside, could be readily observed. Isolated groups of palms gave way to more and more fruit trees and eventually to orchards extending for miles. The landscape was undulating and here and there the heat of the sun had caused great fissures to occur in the soil. One could easily imagine how these rifts collected water during the rainy season and caused the great floods which are typical here at that time of year.

Each of the air-conditioned train compartments had four bunks which could be converted into six seats during the day. We shared our compartment with two Muslims and found we were able to converse with them quite freely. They were wealthy but unostentatious businessmen from Lahore. My vis-à-vis performed his religious exercises regularly in the morning, at noon and at night. He would spread a towel on his bunk, cover his head with a handkerchief knotted at the corners and, with his hands raised forward and his forehead resting on his pillow, he would kneel and pray. The performance was quite unself-conscious and curiously impressive.

We arrived at the old university town of Lahore in the evening feeling relatively fresh. We were greeted there by friends of Knips as well as by a few German engineers and their radiant young daughters. The press was again in attendance and the *Pakistan Times* requested periodic exclusive reports and photographs of our progress on the mountain.

After a stop of only half an hour we embarked in another train and waved good-bye to our friends and compatriots. The desert sand now began to penetrate the compartment and we were soon covered in dust and quite filthy. Our companion on this train was an Afghan who spoke German and told us that he had been studying dentistry for the past nine months and had been in Munich with Professor Kranz at the time of our departure. Thus he knew all about the events which had preceded the launching of the expedition. We chatted for a while and then tried to settle down on our bunks. A linen sleeping-bag was provided and this protected us in some degree from the sand.

At about 3 o'clock in the small hours we arrived in Rawalpindi. Our considerable luggage was stacked on to two rickshas, the Punjab horses trotted off into the close, silent night, and we were soon at our comfortable bungalow hotel removing the grime and sand of our long journey in the luxury of a bath.

We awoke to a stiflingly hot day. It appeared that we had just caught the tail end of a heat wave which had lasted for some weeks and we felt quite elated on being told that we had chanced upon an exceptional stretch of good weather and that the season was extremely favourable for our enterprise. This was enough to make the most oppressive heat endurable. Furthermore, the local people seemed convinced of the success of our expedition, on what grounds it was impossible to conjecture.

After our short sleep Knips and I went to the Office for Kashmiri Affairs to get the necessary entry permit for Kashmir. At the same time we received the licence for Peter Aschenbrenner's triple-barrelled gun and permission to use our ultra-short-wave radio set on the mountain. We were joined in our conversation with State Secretary Fahim by Colonel Ata Ullah, head of the Ministry of Health, a friendly, energetic little man with a black goatee beard. He showed me a letter he had had from the leader of the American Chogori expedition invoking his support. There was much to discuss and Colonel Ullah agreed to call on us at our hotel in the evening when he would have more time at his disposal.

In the afternoon we were able to catch up a little on our sleep. It was unbearably hot and the atmosphere was oppressive and sultry. At about 5 o'clock we were aroused by the violent rattling of doors and windows as a sudden sand storm sprang up. The awakening was timely. It was almost the hour for dinner.

Colonel Ullah duly arrived accompanied by our Pakistani helper and friend from the Rawalpindi Broadcasting Company. We discussed arrangements for the weather reports and came to the conclusion that they might come through best over the United Nations transmitter in Rawalpindi. The Colonel was good enough to place a lorry and a jeep with local drivers at our disposal for the next few days. This meant that we could make our purchases in the bazaars—we had to procure all food supplies for the porters on the approach route—and should be able, when our railway goods wagon arrived, to move our nine tons of baggage to the airport, all with the minimum loss of time.

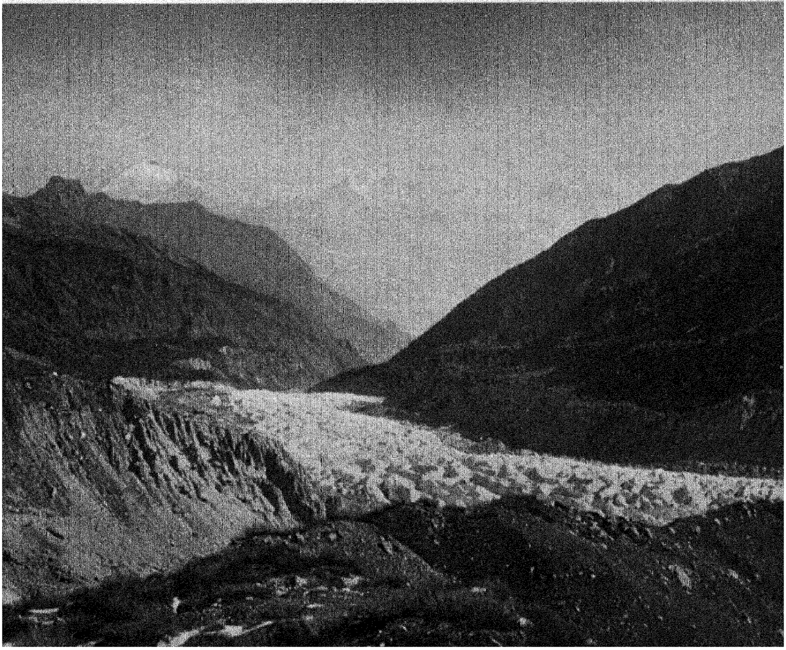
We set about buying in our supplies on the following morning and found the market a colourful scene. From a main street covered inches deep in fine dust there branched off a number of small side-alleys many of which were so narrow that two people could pass only with difficulty. Both main and side streets were flanked by dirty wooden shacks, and in the alley devoted to the sale of fats and soap everything was screened against the sun in such a manner that one had the feeling of being penned in an enclosed corridor, noisome with pungent and rancid odours. The merchants were squatting on stools among their wares and, contrary to common oriental usage, were not prepared to bargain. Naturally everyone knew in advance from the press that we were Germans on our way to Nanga Parbat.

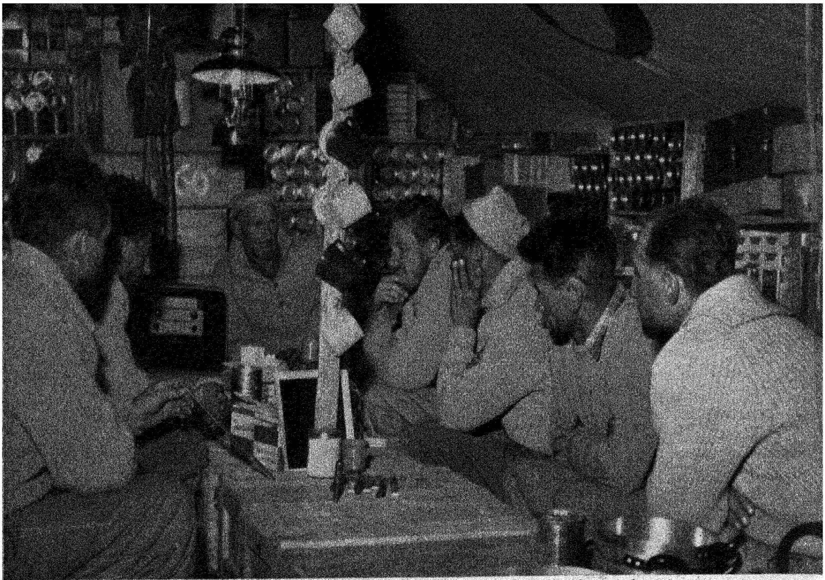
The business of shopping was soon completed according to our pre-arranged schedule and we hurried off to the station to meet our youngsters, Buhl, Kempter, Köllensperger and Rainer. The Lahore train had arrived and passengers were already leaving the station, among them our friends who were in rather poor shape. They had been en route for fifty-nine hours (covering a distance of some thousand miles) inside the goods wagon coupled on to the passenger train without benefit of air-conditioning or indeed any comfort whatsoever. Obviously they had suffered much from the heat, dirt and sand. Buhl was the worst affected. He had a badly inflamed throat and was in need of immediate medical attention.

However, our vital equipment was safely arrived in Rawalpindi and our young comrades were the first to agree that their discomfort had been well worth while, more especially as

The Rakhiot Bridge in the Indus Valley

The Rakhiot Glacier and Rakhiot Valley with a view of the Indus Valley and the peaks of the Karakoram group



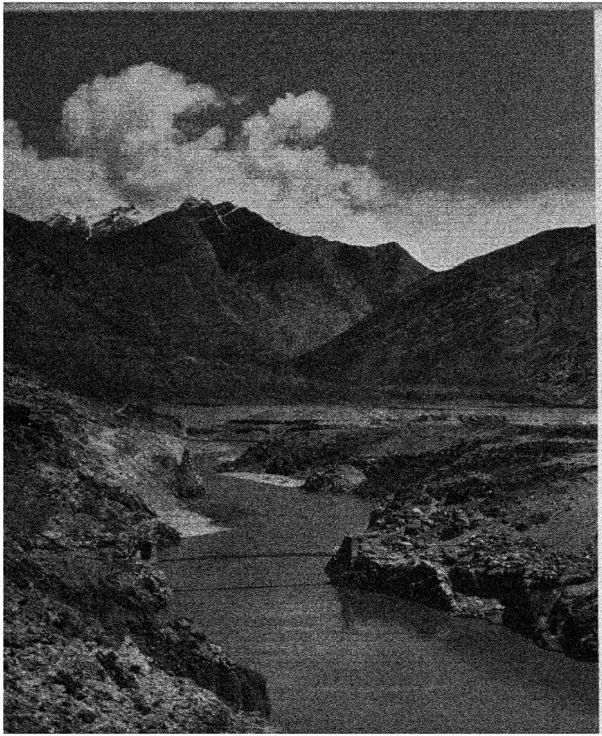


The climbers congregate in the store tent. It was here that they heard the news that Everest had been climbed

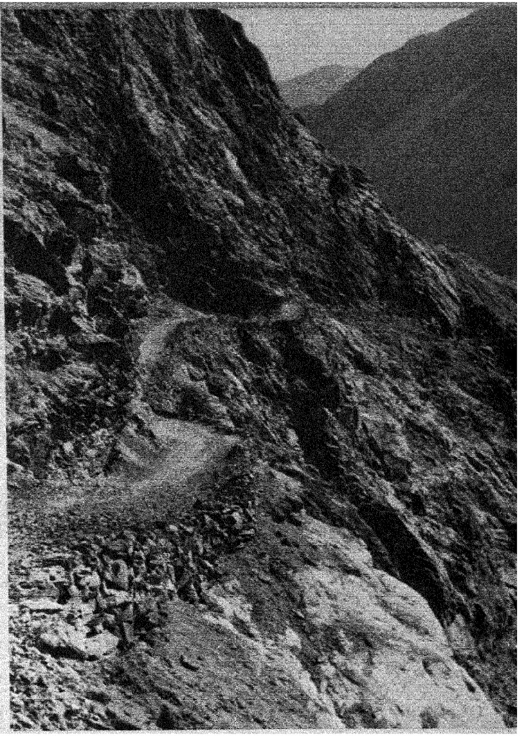
At Talichi. Loads are distributed for Transport up to the Base Camp

The Base Camp with the Great Chongra Peak in the background

A view of the north-east slopes of Nanga Parbat as seen from the snow-covered interim Base Camp



The Astor Bridge in the Gilgit Valley



The dangerous road between Gilgit and the Rakhiot
is cut precariously into the steep crumbling roc

Rainer had discovered on the way that the van was in process of being uncoupled and shunted into a goods yard. If he had not been there to intervene our baggage might well have been delayed by several days which would have meant additional expense and loss of valuable time.

While Albert Bitterling stayed behind in the blazing heat of the station to keep an eye on the goods van, the newly arrived travellers went off to the hotel to clean up and rest. Once installed in the bath-tub Kuno Rainer seemed reluctant to be parted from it. Knips meanwhile arranged for the baggage to be driven to the airport and I gave Buhl an injection of penicillin.

In the evening we were guests at the home of Colonel Ullah which we were surprised to find furnished in the best European style. It was a distinguished gathering and the Colonel's three young sons waited charmingly on the guests.

The following day we were to fly to Gilgit in four batches. Two 'plane-loads were to take off at 5 a.m. in the morning, the other two following between 9 and 10 o'clock. The Polish pilots were anxious to get away early as the weather was more reliable in the mornings. It was Wednesday, 26th May, a great day for us. At 3 o'clock Knips, Kempter, Köllensperger and Rainer were called to go with the first 'planes. I was quite unable to sleep on after this and kept listening for the arrival of a ricksha conveying the third group who were to bring the remaining luggage from Karachi. I dozed on and off, thinking of the flight to Gilgit, wondering what our first glimpse of Nanga Parbat would be like, trying to work out which flank would be visible. I was called back to reality by the arrival in my room of the last contingent.

It was 5 o'clock and after a few words of welcome we breakfasted and repacked. Our newly arrived comrades were delighted to hear that at this hour already two 'planes with four comrades and the major part of our baggage were about to take off for Gilgit and that we were to follow in a few hours. From this point only our climbing equipment would go with us, the rest of our stuff remaining in the trunks to be stored away until our return.

Just before 8 o'clock the cars so kindly loaned by Colonel Ullah were already at our disposal and we went to take leave of our ambassador who was for the moment staying at our hotel on account of the illness of his wife. Only one thing was disquieting: where were our Sherpas? Some months before our departure from Munich a team of five Sherpa porters was engaged in Darjeeling. The Sirdar was to be "Tiger" Pasang Dawa Lama, famous for his exploits with Fritz Wiessner on K2 in 1939 and his ascent with F. Spencer Chapman of Chomolhari (24,000 feet) in 1937. We had made arrangements that they should meet us here. I despatched a number of telegrams in an effort to trace their whereabouts and find some explanation for their non-arrival and left instructions should they come after we had gone. Then we were ready to leave Rawalpindi.

The air route from Rawalpindi to Gilgit is said to be the most spectacular and hazardous in the world. It is not much advertised owing to its great strategic importance. While the eastern half of Pakistan in Bengal is separated from the mother country by a thousand miles of Indian territory, its north-western corner, the Gilgit Agency, would be cut off for three-quarters of the year by snow on the Babusar Pass but for this boldly improvised air route. Wild atmospheric disturbances are liable to develop at any moment above the tremendous gorges of the Himalayan valleys but there are only one or two meteorological stations along the whole route. The freighters used as air liners are none too efficient, their ceiling is comparatively low, and after crossing several high ridges the aircraft must twist and turn within the narrow corridor formed by the gigantic Indus gorge.

Arrived at the Rawalpindi airport we saw two Dakotas touch down which meant that the first load had been safely ferried to Gilgit. Our luggage was taken aboard, we paid our fare amounting to over 10,000 rupees and the two twin-engined 'planes took off at 10 o'clock. The 'planes were heavily laden but we soon gained height and were flying through the Kaghan valley, a tourist centre famous for its beauty, towards the Babusar Pass and the Indus gorge beyond. We had no eyes for the valleys below us; the first 13,000 feet peaks were already appearing and we cleared many small passes by an uncomfortably narrow margin of only sixty feet or so. After half an hour's flying the mountains assumed more massive proportions and all were covered with snow—a preview of what awaited us on Nanga Parbat.

Then one of the air crew called me into the pilot's cabin and pointing ahead shouted: "Nanga Parbat—cloudy!" Tense with excitement I stared in front of me. The whole sky was cloudless except for one mighty bank of cloud. This must conceal our mountain! I was still lost in conjecture when the clouds receded a little and the summit massif was revealed, a spectacle of such purity and splendour that I was momentarily overwhelmed. My mind flew back to the visit to Munich of the German ambassador to Pakistan when he had said of his flight round the mountain: "Nanga Parbat is a vision of such splendour that it seems somewhow appropriate that man should never set foot on her summit, and that she should continue to dominate Kashmir eternally inviolate."

We continued to gaze on the mountain enthralled, drinking in as it were its enchantment. Only gradually did we bestir ourselves to compare its outline with the mental picture which had grown familiar to us from previous expeditions and thus to try to find our bearings. The Diamir flank, its icefalls covered in deep snow, gleamed with such brilliance that at last I reached for my camera and sat in the open pilot's cabin photographing as we flew. Now and again the panorama of immense ice barriers and ridges would disappear from sight veiled by a bank of cloud as though the supreme moment of total revelation was being temporarily withheld.*

We had by now cleared the Babusar pass which was still covered with deep powder-snow; crossing by jeep would indeed have cost us many valuable days. The Dakota began to drop from its height of 18,000 feet and headed for the Indus valley. Nanga Parbat still rose up to our right, a veritable corner-pillar of the gigantic Himalayan range surpassing every other peak on the horizon. The 'plane swung to the right and suddenly our future approach route came into view; we could see the Buldar ridge, the East Arête, Silver Crag, the two north summits, Ganalo Peak and, at the foot of the magnificent ice wall of the North-East Flank, the Fairy Meadow which marked the beginning of the snow line. I was still preoccupied with thoughts of the mountain and memories of my brother when I became aware that the 'plane was skirting huge precipices and dropping down more and more towards the Gilgit River, obviously preparing to land.

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* These constant atmospheric disturbances are a particular feature of the mountain. It is said that Nanga Parbat lulls the climber into a sense of security and then strikes. During the fateful expedition of 1934 a blizzard was raging around the lower camps while higher up Merkl and his companions were still advancing towards the summit in bright sunshine. They were thus trapped without warning.

A gay scene confronted us as we stepped from the 'plane. The pipe band of the Gilgit Scouts was there to greet us and we were received by Mr. Mohammed Khan, the Gilgit Political Agent, the Mir of Hunza, the local doctor, the Commander of the Gilgit Scouts and other leading figures of this small Himalayan community. As each came forward to welcome us wreaths of sweet-smelling flowers were hung round our necks until we looked less like mountaineers than cattle *en fête*. A row of Hunza porters was already assembled; they were magnificent fellows and looked like being good substitutes for the still missing Sherpas.

After this really heart-warming welcome it was my duty to inspect the guard of honour accompanied by the Mir of Hunza and the Political Agent. The Gilgit Scouts are an institution going back to the days of the British Raj. They are part of the frontier corps led by regular army officers but are recruited locally and are not part of the army. This duty discharged, we were then conveyed by jeep to our bungalow for luncheon, after which followed discussion of arrangements for jeeps, porters and Hunzas and the important question of how we were to negotiate the imperfect road in the Indus valley between Talichi and the Rakhiot Bridge.

I was obliged to devote most of my time on the following day to social calls although I was beginning to chafe at the impossibility of getting down to any writing, much less to any serious work of preparation. For, to the detriment of our digestions not yet accustomed to the Pakistani cuisine, all the local dignitaries were vying with each other for the honour of entertaining us, and the last thing I wanted to do was to offend our kind and well-meaning hosts. Obviously an expedition such as ours provided welcome relief from the general monotony of life in this remote spot and it gave me great pleasure a few days later to bestow upon the Political Agent, who was a portly gentleman, the title of "Father of the Expedition" in recognition of his great helpfulness and many services to us.

It was natural that a polo game should have formed part of the entertainment arranged in our honour, for the game originated in Central Asia and has become part of community life there. It is played all over the Hunza principality, even in remote hamlets, where the spectators sit on stone walls enclosing the ground. Gilgit teams played for our benefit although, alas, the game was interrupted by a sand storm and could not be played to a conclusion.

During all this time we spent in Gilgit no woman was seen in public, with the one exception of the doctor's wife who sat with us on the official dais to watch the polo game. In the Hunza principality Purdah is not so strictly enforced. This may have something to do with the fact that the Hunzas belong to the Ismaili sect whose head is the fabulous Aga Khan.

After the hot days of the Sindh desert the green fields and orchards of the Gilgit valley were a source of great delight to us. We now found ourselves in a countryside in many ways comparable with our own Alpine valleys. The people too were very much after the Tyrolese pattern and one felt at ease with them from the first moment. The gardens with their mulberry trees, elms and standard roses rising above a profusion of multi-coloured flowers might well have belonged to the foothills of Upper Bavaria. But for all this apparent fertility the region has but meagre rainfall. It is irrigated by little streams fed by the glaciers from the mountains which rise behind the vast barren walls of rock enclosing the valleys. The supply of water depends on the quantity of ice melted by the sun on the glaciers. A spell of cool cloudy weather may mean drought, while—paradoxically—bright sunshine promises abundant water supply. Gilgit is built on relatively extensive terraces spreading high up the valley banks. These abound with fruit trees, and apricots grow wild even in the highest parts of the surrounding mountain valleys.

All the western types in Gilgit seem to be Hunzas. They come from the Hunza territory which stretches northward from Gilgit up to the mountain town of Baltit built in terraces into the slopes of the vast Hunza valley at a height of some 8,200 feet. Towards the Soviet frontier it is protected by a mighty chain of 23,000-25,000 foot peaks extending from the Boiohagur Duanasir up to the Batura. Towards the south the steep north face of the 25,500 foot Rakaposhi presents a magnificent spectacle.

Originally the name "Hunza" referred solely to the river valley but over the centuries it came also to apply to that tribe of the Burusho-speaking peoples which had settled on its western bank. This mountain tribe comprising some 10,000 souls is now distributed in well over a hundred villages situated at heights varying from 5,000 to 8,000 feet. Thanks partly to the exceptional degree of their isolation the Hunzas have been able to preserve their millennia old civilization on an extremely primitive level uninfluenced by the tide of mechanized progress which has swept the world at large. Moreover, the Hunzas have also kept their racial characteristics intact and as one approaches Gilgit or penetrates into the Hunza valley one has the impression of coming across an isolated ethnic group within the Asiatic family. The tale goes that the Hunzas have in some way descended from European stock. They have a story that their community was founded by three warriors who remained behind from the campaign of Alexander the Great, but whether this legend has any basis in history is open to question. Similar isolated groups have been discovered in the nearby mountain valleys of the Hindukush in Afghanistan in whose language no traces whatever of Mongolian, Semitic or Indo-Germanic origin can be found. The Hunzas' Burusho language too would have developed independently in the course of past millennia. It is possible that the Burusho language may be a relic of an ancient language spoken by aborigines in the whole of Northern India before the Sanskrit-speaking (Indo-Germanic) invaders broke in from Persia.

The royal dynasty, so the Mir of Hunza maintains, have wielded the sceptre since the time of the crusades and penetrated into the valley from Baltistan. Certainly the current ruler who was present at the various functions we attended, was of a different type from his subjects. The genuine Hunzas who, as I have said, show a striking resemblance to our Tyrolese, are handsome people of medium build. In European dress they would probably pass unnoticed in an Austrian mountain village. Nevertheless Rhabar Hassan, a police officer who acted later as our liaison officer, told us that the same crude customs prevailed with the Hunzas as in the Rakhiot and Astor valleys. He said, by way of illustration, that a man who murdered his wife's lover would be imprisoned for twenty years, but if he despatched both his rival and his unfaithful wife then he would be acquitted. It seems possible that this story was more colourful than accurate, or else dated from the distant past, for to-day crimes of violence are practically unknown within the Hunza community and social life is governed by the Mir's benevolent autocracy without recourse to definite laws.

As to the quality of the Hunza porters in comparison with the Sherpas of Nepal and Darjeeling, I would say that potentially they are every bit as good both in physique and mental equipment, though they lack the long-standing mountaineering experience of the Everest porters. The Hunzas have had only sporadic contact with climbing expeditions and it would be unjust to expect from them the qualities which we take for granted in the Sherpas. But they will surely improve with training and experience and it would be an altogether healthy development if the Sherpas were obliged by competition from the west to modify their excessive wage demands. The conquest of Nanga Parbat with the help of Hunza porters was just within the limits of the possible. But in an attempt on a peak of the difficulty of Chogori (K2), for instance, it would be necessary to take a carefully chosen team of porters a few weeks beforehand and put them through a course of alpine training. Once educated in the basic principles of rock and ice work I think the Hunzas would be well on the way to becoming proficient climbers. Certainly the material is there.

CHAPTER III

The Approach

IT WAS NOW 8th May, our second day in Gilgit, and we were impatient to get to grips with the mountain. The team had been busy at the airport on the previous day repacking the supplies and equipment into carrying loads and everything was now ready for our departure. Kuno Rainer had proved himself the soul of helpfulness. Modest and self-effacing to a degree yet always ready to lend a hand where it was most needed, he had endeared himself to us all.

Throughout our journey in Pakistan we had been trying to get hold of a Pakistani flag to carry up from camp to camp and, if fortune favoured us, to plant on the summit. But so far no flag had been forthcoming. Even in Rawalpindi where, aided by Colonel Ullah's driver, we had continued our search on the eve of our flight, we had met with no success. But now events took a dramatic turn. In the presence of the high military and civil dignitaries of Gilgit and the State of Hunza, the Political Agent, Mr. Mohammed Khan, presented us with a large green and white banner bearing the Moslem symbol to fly at Base Camp, and a small pennant to be carried to the summit. The entire ceremony was filmed. The Political Agent, obviously affected by the thought that his image would shortly be seen all over the world, was so overcome by stage fright that two rehearsals were necessary before the cameraman was satisfied. Then the Scout band struck up and I made a short speech of thanks to the local potentate and, through him, to the Pakistani government. The ceremony concluded with the Pakistani cheer, Zindabad! "Nanga Parbat expedition: Zindabad! Germany: Zindabad!

Pakistan: Zindabad!" to which we responded with three resounding *Berg Heil's*. The Political Agent shook hands with each of us in turn and soon the first group were on their way to the airport whence we were to set off for Talichi in relays by jeep.

On the airfield Ertl had an agreeable encounter. He was filming our convoy of jeeps when an airport worker went up to him and said in English: "I have seen you on Port Mechili in Africa!" Hans had served there as a war reporter and when Rommel's men captured a battalion of Indian soldiers, he had spoken a few words of Hindustani to this Hunza man. The encounter had been only very brief but it was Hans's film camera that had stirred the Hunza to recognition.

The six of us who stayed behind spent the remainder of the afternoon resting pleasantly beneath an old elm in the bungalow garden, while the wealth of flowers around us filled the air with heavenly fragrance. In the evening there was another party at the officers' mess and we were all a little merry when at midnight we returned to our beds. Everyone had now moved into my bungalow as it was the biggest and most comfortable, being equipped with running water, shower baths, plenty of cupboards, tables and chairs, a splendid verandah and five servants ready to do one's slightest bidding. Built high into the southern slope of the Gilgit valley and commanding magnificent views of comely orchards and grand mountain scenery, the bungalow was ideally situated and, but for the pull of the mountain, would have been an idyllic spot for a protracted stay.

On the previous day only five jeeps had gone to Talichi; they would not return until today and thus it would be afternoon before the second batch could start. This meant an unfortunate delay. It was to be hoped that the bargaining in Talichi with the Thassildar from Chilas, our link with the porters, was meanwhile turning out to our advantage and that a reasonable price for transport from Talichi to the Base Camp would be agreed. Knips and Frauenberger were in charge of the preliminary talks.

We now learned by letter that there were three hundred porters at Talichi, hill peasants assembled there on the orders of the government, and that they were asking 50 rupees each for two days' march starting from the bungalow. It was a long route, following the Indus valley to the Rakhiot Bridge and thence across the 8,850 foot Buldar Ridge up to Tato, the last settlement in the Rakhiot valley. From there the way coiled steeply up to the Fairy Meadow and reached the interim Base Camp after a further two hours' march. But even so the price was excessive. A few years back the coolies would get 4-6 rupees for such a march. Obviously we should have to bargain, a time-consuming procedure. But as only five instead of ten jeeps were in operation the approach would in any case have to be somewhat delayed.

The first jeep transport was accomplished without incident but four out of the five vehicles returned in need of repair. Things began to look grim. We now tried to hire private jeeps and one contractor promised his only one for the following day. He undertook to run it to Talichi four times which would have meant shifting quite a number of loads, but in fact he went only once. We arranged, however, that on the day following twenty-five horses should be marshalled into a transport column and carry a hundred loads to Talichi in two days. Mohammed Khan (the Political Agent) our only helper in all our tribulations, had only a single jeep at his disposal. He was a real friend and would have done anything he could for us but obviously he could not achieve the impossible.

While we were thus occupied in Gilgit our friends in Talichi were getting restless. Their negotiations with the porters were rendered the more difficult as the men were not particularly keen to have the job and would rather have been working their own fields.

At last, on Sunday, May 10th, a loaded jeep accompanied by Hermann Köllensperger left Gilgit for Talichi and within two hours a large caravan of thirty donkeys carrying a hundred and twenty loads, trotted off. This meant that each beast was carrying four loads, a weight of about 200 lbs., an almost incredible feat. However, it must be admitted that on arrival in Talichi many of the animals were near to collapse.

On the same day a further twenty Hunzas arrived in Gilgit to offer us their services. They had come barefoot and scantily clad from their villages in the Hunza country, a distance of sixty-three miles. But we no longer had any use for them and all we could do was to give them one day's pay of ten rupees so that they could buy food for their return journey.

At midday I suddenly received a telephone call from Talichi. It was Knips reporting that the porters were getting out of hand from having nothing to do and that unless the loads arrived that afternoon there would be trouble. On hearing this Mr. Mohammed Khan at once put his personal jeep at our disposal and by early afternoon I was on my way from hospitable Gilgit to Talichi accompanied by Ertl and a Hunza porter. We had an exceptional driver and covered the difficult route in the incredibly short time of two and a half hours.

Our break-neck journey took us along a narrow road hewn into the living rock of the mountainside round hundreds of bends, under overhanging rock, through bottle-necks, gorges and even torrents. At times we were driving several hundred yards above the Gilgit valley and later above the Indus. While still in the Gilgit valley at the confluence of the Hunza and Gilgit Rivers, we saw to the north the last shimmers of light on the ice flanks of Rakaposhi which, its shape reminiscent of a mitre, surged majestically above the surrounding peaks. The thoughts of countless climbers have long revolved round this 25,550 foot Karakoram giant and one day it too will meet its conquerors.

After one and a half hours of this mad progress we reached the confluence of the Gilgit and the Indus. These mighty rivers, both very wide at this point, have sawn their way into the rock walls in a series of terraces. The rivers themselves flow past deep down between 150-300 feet high sandbanks, the work of the flowing water over the ages, while nearly 3,000 feet above the river bed hollows scooped in the rock, surfaces worn smooth as glass and a stratum of lighter-coloured stone give abiding evidence of the mighty torrents which once raged there.

At about half past five we saw Nanga Parbat again, this time from Gor. There it stood in singular beauty, its icy flanks glowing in the evening sunshine as if to welcome us. Its outline was partly obscured by the foothills but to the left we could see the East Arête rising from that spot where in 1934 Camp VII had stood on the Whipped Cream Roll, up towards the Silver Saddle, which in turn was flanked by the mighty cones of Silver Crag and the South-East Summit. The Silver Saddle is almost overwhelming in its beauty and the sight of it on this evening stirred our enthusiasm to new heights. Instinctively we reached for our field-glasses. Between Silver Crag and the North Summit a depression in the rock formation of the north-east flank, completely filled with snow and ice, makes an almost horizontal plane which then, in drops of several hundred feet at a time, plunges into the north-east wall of Nanga Parbat. From this ice-field, the Silver Plateau, situated at a height of 25,000 feet, masses of ice in the form of snow-dust avalanches hurtle through the couloir in the north-east face down to the Rakhiot glacier.

Thus our first sight of Nanga Parbat from below, just before dusk.

As we approached the Indus valley it was becoming oppressively close and the bare yellow-brown stones were almost incandescent from the stored-up heat of the day. Threatening yellowy-grey clouds were gathering over in the Astor valley and scarcely had we arrived at the bungalow in Talichi than the first heavy drops of rain began to fall. Swiftly it gathered momentum and soon a mighty storm was raging and roaring through the Indus valley. But it spent itself as quickly as it had come and soon all was still again.

But we could not give ourselves up to the contemplation of all the wild beauty around us for about three hundred coolies, that is to say hill peasants, and few Hunzas awaited our instructions. So, by the light of a single storm-lantern we got down to the job of preparing the loads for the first eighty porters to leave that night: It had been agreed that 25 rupees would be paid for each march to the interim Base Camp at the snow-line and that for loads of over 50 lbs. 8 annas for every additional pound would be paid. This meant that it was costing the expedition about £1,000, an enormous sum, for transport from Talichi to the interim Base Camp.

Meanwhile the Pakistani mountain peasants sat about in the dark in groups round the camp fire intoning their melancholy chants. Suddenly, as though possessed, the native band broke into deafening drumming and piping and this continued until well after midnight.

On the following day, Monday, 11th May, the pack animals began arriving at the bungalow. The porters at once relieved them of their loads and watered the poor weary creatures. Then everyone got busy and the bungalow garden became a veritable hive of activity. Knips sat with the Tassildar on a pile of packing-cases and both of them checked and rechecked the spring-balance as every load was weighed. The weight in kilograms was then marked on the load in blue pencil and was noted down by the Tassildar against the name of the porter. The load was then taken up and a few minutes later could be seen moving along the Indus valley on the back of some mountain peasant.

As most of the cases containing our provisions were now on their way to the interim Base Camp, we had to content ourselves with biscuits and chocolate after our refreshing dip in the clear waters of a mountain stream, discovered ten minutes' walk away by Fritz Aumann who was a fiend for cleanliness.

At noon on Tuesday, 12th May, the rearguard of the expedition—Rainer, Bitterling and Kempter—arrived, bringing on their jeep the last crates from Gilgit. Meanwhile Walter Frauenberger and Hermann Buhl with eight Hunzas had gone ahead to set up the interim Base Camp at the snow-line at an altitude of about 12,000 feet.

While we were feeding the new arrivals with quickly prepared soup we received a call from some officers from Chilas. Chilas lies about thirty miles down-river in the Indus valley and is the seat of a Political Agent who, however, is subordinate to the Political Agent of Gilgit. The town of Chilas gives its name to the entire surrounding region.

And now, in the early morning hours of Wednesday, 13th May, it was time for the main body of the team to move on. Köllensperger and Bitterling, incorrigible late-sleepers, were to follow with the last porters the same afternoon. Otto Kempter and Kuno Rainer were to bring up the rear on Thursday.

We were all beginning to feel some depression at the total absence of news from home since leaving Karachi. The feeling of being so completely cut off from the world was not a pleasant one. It was now twelve days since we had left Karachi and we had been on the move altogether now for four weeks. We felt as if we had been sending all our letters into the void, for we had had no word in reply. Our postal arrangements were not yet functioning properly for we had originally told our friends to write direct to Gilgit. This meant that even if sent by airmail our letters would have to come overland from Rawalpindi. And it would take two to three weeks longer via Chilas. When we arrived in Karachi we made arrangements that letters addressed to us at the Embassy there would be flown in batches to Gilgit and would be driven from there by jeep to the Rakhiot Bridge where our mail-runner would be ready to take them on. But of course the earlier mail did not profit from this arrangement and that is how it came about that letters posted before the middle of May did not reach us until after the conquest of the summit, while later postings reached Base Camp by air within about twelve days.

It was half past six when we at length moved off from Talichi. Our path turned and twisted and when we caught sight of Talichi again in the afternoon from the top of the Buldar Ridge it appeared as a remote green oasis.

Our path lay on the important caravan route Gilgit-Chilas-Afghanistan-Kabul. The road was dusty and swung now near to, now away from, the Indus; in places it was actually built on to the precipitous walls of the right river bank, and was along its whole length mercilessly exposed to the sun. After swinging round innumerable bends and skirting many ribs of rock which ran down to the river, we ultimately gained a long straight stretch leading to the Rakhiot Bridge. The Bridge itself was reached after a march of two and a half hours. Hundreds of mountain peasants were at work on road repairs as torrential rain and avalanches of stones had made the way partly impassable for jeeps. All along the route we met porters who had carried one load to the interim Base Camp and were now returning to Talichi for another. There were altogether three hundred porters on the move, most of whom had to make two journeys to shift the five hundred loads. Over the whole route there was neither tree nor rock to offer relief from the heat of the day—and at noon the sun beat down almost vertically—so the porters preferred to ascend with their loads at night, returning over the Buldar Ridge by day.

Knips covered part of the route on horseback. He made a noble spectacle but his progress actually was slower than that of the footsloggers.

On the road from Talichi to the Rakhiot Bridge I received my first message from Walter Frauenberger informing me that the porters had carried their loads up to 12,000 feet, the site of the interim Base Camp, and would not be proceeding to the permanent Base Camp until the 14th May. It was now the 13th. The 14th May marks the beginning of the Moslem fast of Ramazan, a month during which the faithful take a full meal only at sundown, nothing but water being permitted during the day. The porters would obviously not be in the best physical condition during this period. They would still be capable of carrying loads in a zone above 10,000 feet, the climate of which corresponds roughly to temperate European conditions, but they could not be expected to work in the heat of the Kashmir valleys.

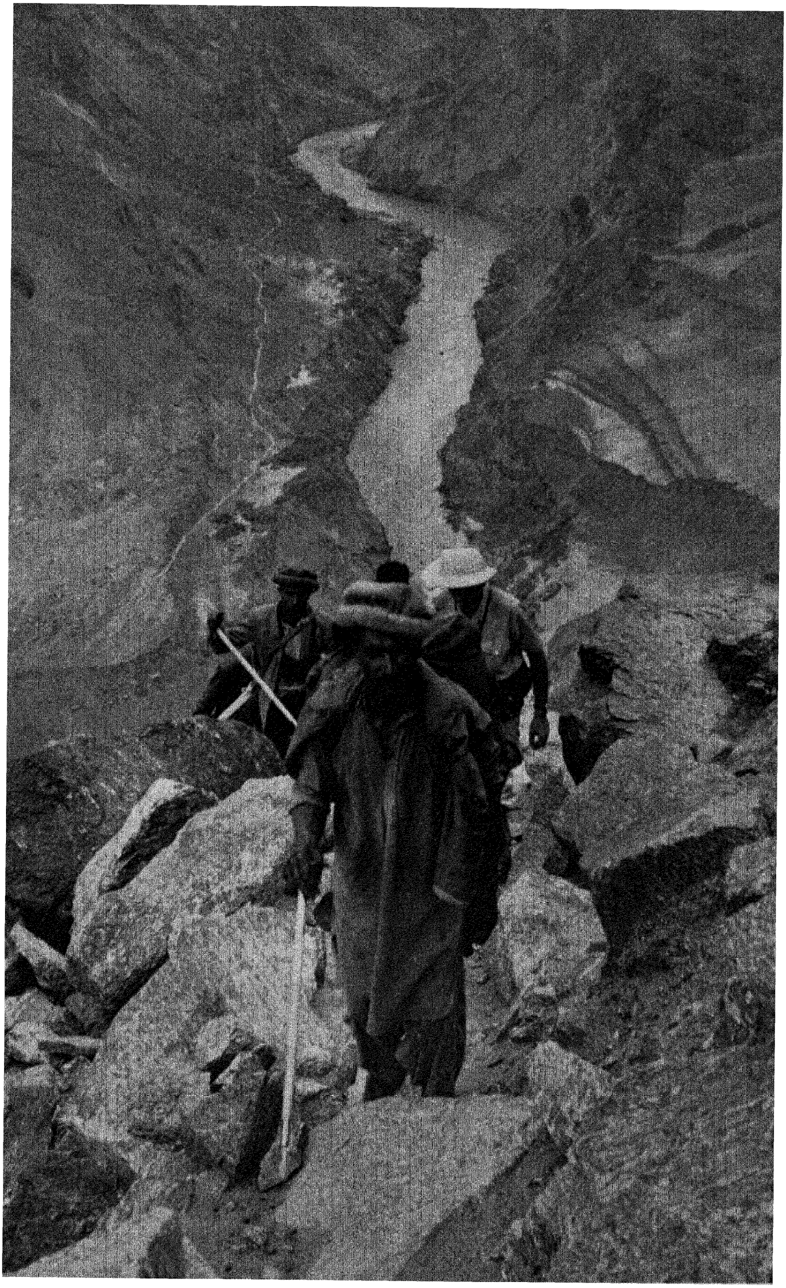
It should be emphasized that it is only at about 10,000 feet that vegetation really begins and that it then extends as a belt of meadowland and forest to almost 13,000 feet. The last isolated patches of tree-growth usually consist of gnarled weather-beaten birches and dwarf pines, while the meadowland extends right to the snow-line. The Indus valley, at a height of about 3,000 feet, is nothing more than barren rocky wasteland where all green things are scorched up by the sub-tropical sun unless they are specially irrigated and nursed as in the oasis towns and villages. To stand amid this desolation and, with head thrown back, to look up the sheer bare walls of sand and rock is an impressive experience. For there, far above in the 10,000 feet region, one can discern a ribbon of bright green running the entire length of the valley. Above that a dark green belt is visible, the forest of mighty Himalayan pines. Higher still, one can see with the aid of field-glasses the slender trunks of the mountain birches, and finally, stretching to the summit, the world of eternal snow.

But to return to the fast of Ramazan. There was no mistaking the fact that the efficiency of the porters from the neighbourhood of our approach route was somewhat impaired by their devotion to their religious duties. Our Hunzas, however, who were subject to the same religious laws, had been granted exemption from fasting in order to assist the German sahibs. They had set off from their village with ceremonial honours to share in the struggle for the summit of Nanga Parbat. This entailed for them the obligation not to abandon their post unless released by the expedition leader, otherwise they could expect to incur the contempt of their community and be sentenced to forced labour by their ruler, the Mir of Hunza.

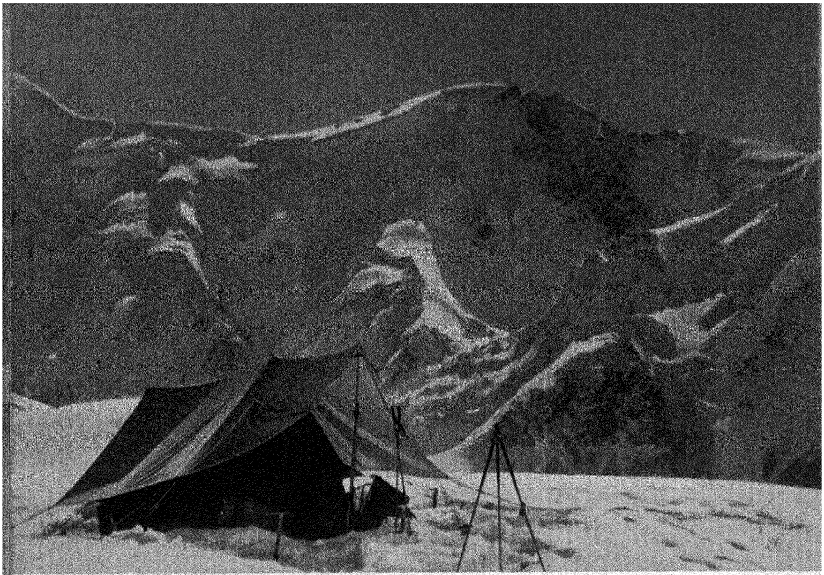
Since Pakistan achieved independence there have been no more coolies as such. The mountain peasants work for organized undertakings such as road-building or, as in our case, an expedition, only if they receive official orders from their government to do so. As we had gained the goodwill of the Pakistani government from the start it was comparatively easy for us to arrange everything as we wished. Without this goodwill such a project would be beset with exceptional difficulties.

On the morning of the 13th May the transport column was approaching the Rakhiot Bridge. It was 11 o'clock by the time everyone had arrived and the day was getting unbearably hot. Over the bridge on the southern pier we found a memorial tablet in English commemorating all the sahibs and Sherpas of the 1937 expedition. It will be remembered that this expedition went out under the leadership of Dr. Karl Wien and that during the night of the 13th-14th June all members but one were assembled in Camp IV at an altitude of 20,200 feet on the highest terrace of the Rakhiot Glacier. At midnight a comparatively small cornice from the west flank of the Rakhiot ridge had broken loose and had buried the whole team together with their Sherpa porters under its masses of ice.

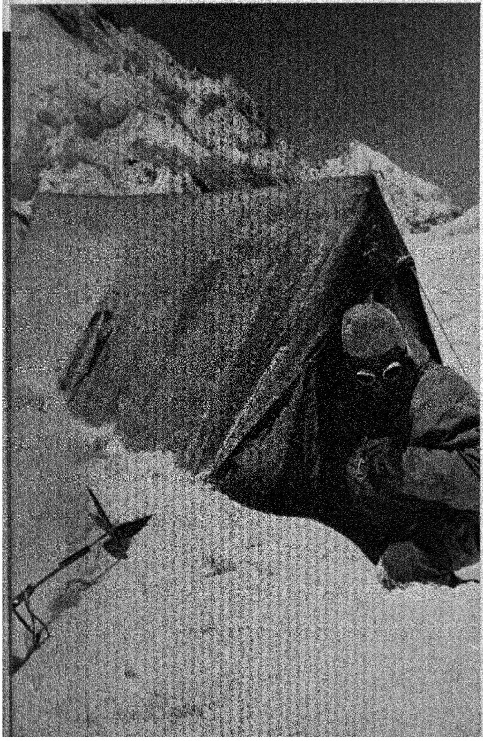
Towards midday we sought some rest and shade under the eaves of a locked hut on the banks of the Indus, the only cool spot within sight, and drank gladly of the gritty, silt-laden river water to allay our raging thirst. Resting thus to escape the worst heat of the day and watching our porters jogging along under



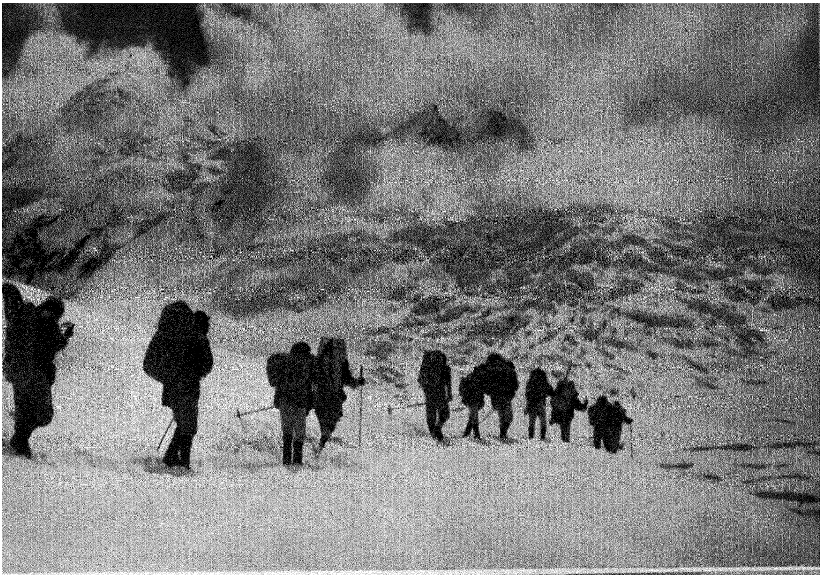
Climbing over the Buldar ridge on the way to Tato



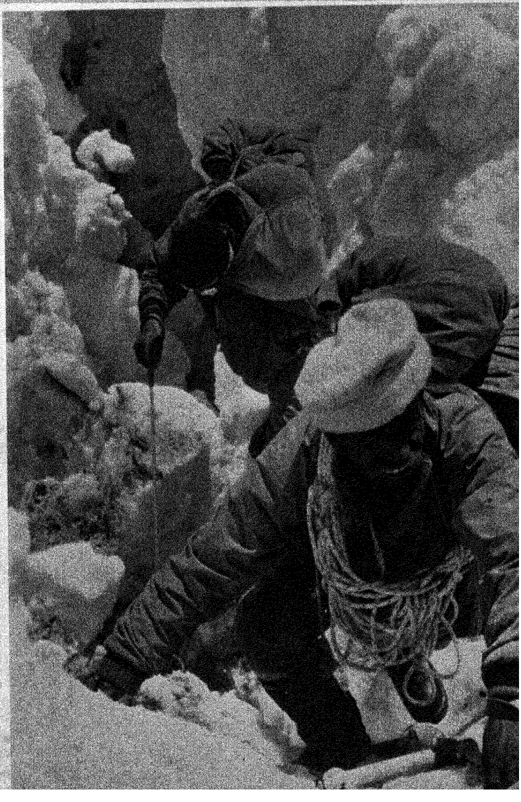
Camp I with a view towards the Chongra group



Camp I



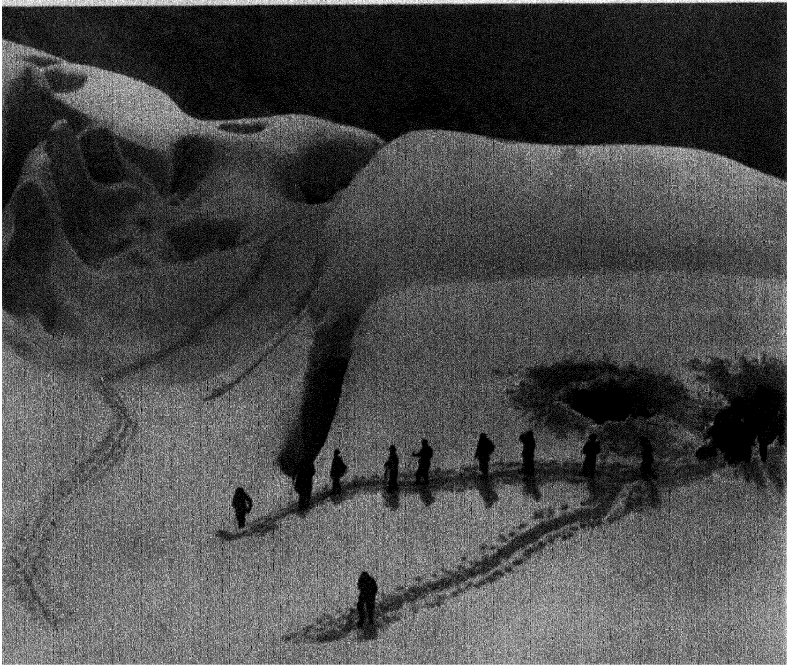
Porters going up to Camp II. The Camp Spur is hidden in mist. To the left, the South Chongra Peak



In the Rakhiot Ice-fall (1953)

Camp II (17,500 feet)

Porters start on the descent from Camp II



their loads round the serpentine bends of the opposite bank, we were treated to an unusual spectacle. Suddenly the whole scene came to vivid life as, in the blazing heat of noon, a gaily dressed Moslem bridal pair approached on horseback, the old people following on foot. As soon as the bride caught sight of us she covered her face with her white veil.

It was now Fritz Aumann's suggestion that we should take a plunge into the waters of the holy river to cool ourselves—a quite unforgettable delight. We emerged cleansed from the dust of the roads, invigorated and refreshed and set about ascending the Buldar Ridge.

We now had to leave the high valley of the Indus (3,600 feet) and gain a further 5,500 feet by means of steep serpentine bends. The broiling ascent along the barren crest of the Buldar Ridge took us over precipitous and desolate terrain which looked as though some primordial giant had scattered masses of rock and boulder in indiscriminate confusion, a rocky wilderness without trace of life or vegetation, and it was not until we had reached a height of about 8,000 feet that we caught sight of isolated tufts of rosemary springing from the rocks. The path was so steep and narrow that whenever we came to sharply projecting rock ledges the donkey-drivers had to grip the beasts by their tails and shove their hind-quarters up or down in the right direction.

When the last and highest crest of the Buldar Ridge had been reached the sharply twisting path dropped obliquely to the right towards Tato. Throughout the ascent I had made a point of offering cigarettes to the returning porters, as well as to any whom we overtook, and giving them a light, for practically none of the poor wretches carried matches. We were obliged to cover the last miles to Tato in darkness. The path dragged on along the hillside for far longer than it appeared at first, and well before we entered the village itself we could see the camp fires glimmering between the trees like so many small red dots. Then at last we knew we were nearing Tato—we could smell it. For Tato possesses a hot sulphur spring and its characteristic bad-egg smell was wafted towards us on the prevailing wind. So now, in pitch darkness we followed the smell of H_2S and the little stream which, fed by the hot spring, bubbled steaming down to the valley. Suddenly we emerged from the woods and saw straight ahead of us a group of Hunza porters sitting around a huge camp fire. They came towards us with a can of water but we were obliged to decline their thoughtful gesture for it was our resolve, as long as we were near inhabited settlements, to drink only boiled water—this as insurance against typhoid and other infections.

Hans Ertl immediately set about marking out an excellent camping site and in no time a tent was run up with our camp fire blazing merrily in front of it. Meanwhile Knips, Köllensperger and Bitterling had joined us and Ertl produced a refreshing drink for us all—Bolivian coca-tea. Then we settled into our sleeping bags and were soon in the arms of Morpheus.

At five the next morning (14th May) we prepared to move off again. The Hunzas had had their fire going all through the night to keep themselves warm, for they had as yet received no sleeping-bags or blankets from us. It would not be a practical proposition to distribute any equipment until we reached the interim Base Camp. Fritz Aumann was pressing for an early start so as to avoid having to make a strenuous ascent in the heat of noon as had happened on the previous day. He had already prepared an enormous pot of porridge for us and this appetising breakfast put us all in good heart. Everything in this world is relative; the porridge had been hastily prepared, it was full of lumps and on top of that had been burned in the cooking, but after days of dry biscuits and packet soups it tasted to us like nectar and ambrosia.

Our way now took us between the last stone dwellings of Tato and up along the foot-paths of the Rakhiot valley. Here we came to a crystal-clear spring, the first palatable fresh water we could drink without misgivings.

The Rakhiot valley is sharply incised and very close; its inhabitants have therefore to a considerable height laid out narrow stone terraces as a base for a thin layer of soil on which to grow their meagre crop of grain. The dwellings themselves are mostly lean-to constructions built on to the hillside, the remaining walls consisting of round stones cemented together.

The roofs are of wood fixed with clay and weighted with stones. Everything is extremely primitive. The inhabitants are dark-skinned people. The men wear moustaches, as indeed they do all over Kashmir, and the women in their trousers, knitted jackets and head-dresses decorated with brass medallions, are reminiscent of Red Indian squaws. Tending their goats—there are no sheep in this region—they certainly make a picturesque sight.

Our path from Tato now lay through sparse woodland of fir and pine and upwards by many steep serpentine bends, until in about two hours we reached at last the Fairy Meadow, a moment keenly anticipated by us all. The local people, incidentally, have a much less romantic name for it; they call it simply Marshy Meadow. Naturally we all had our preconceived ideas about it and it must be admitted that in the event we suffered some disappointment. The view of the North-East Flank of the mountain which was now opened up to us was quite overwhelming, but the meadow itself was much smaller than we had imagined and furthermore the Lambadar, or mayor, of Tato had turned the centre of the meadow into a ploughed field which he had fenced in by a hedge of brownish withered-looking shrubs. On the woodland side there were a few wooden shacks which presumably corresponded to the neat alm huts seen in the Alps, but had nothing in common with them in their appearance. Naturally no edelweiss was out yet; this splendour would be reserved for our return journey.

Some of the porters lay down and rested beneath the pines to enjoy nature in their own way. I searched for the spot from where, twenty-one years before, my brother Willy Merkl had taken the picture through which the Fairy Meadow had become such a familiar scene to all of us at home. I took a few colour shots and we then continued on our way up through the gently sloping forest of tall pines to a clearing traversed by a glacier stream. From now onwards everything was green and the landscape up here at 10,000 feet reminded us forcibly of our home mountains, particularly of the Western Alps.

Quite soon, almost too soon after all the beautiful sights of the past hours, the day's march came to an end and we arrived at the interim Base Camp set up two days previously by Frauenberger and Buhl at a height of 12,000 feet. These two had in the intervening time put in a tremendous amount of hard work and a large store tent had been erected to accommodate the loads which were arriving daily.

While the porters baked their chapati or squatted idly round the fire, Walter Frauenberger was engaged in a battle of words with the head man. The porters were flatly refusing to carry on up to the Base Camp proper. It looked as if we and the Hunzas would have to knuckle in and do all the carrying ourselves. In the afternoon Hermann Buhl came down from the site of the permanent Base Camp with a few Hunzas. They had that morning taken up the second big tent and while clearing away some snow had discovered a number of rusty old food tins, historical witness to the pioneer work of our predecessors. In the evening we new arrivals had our first proper meal—and our first German fare—for a long time. Then at 7 o'clock we crept into our tents tired out but rejoicing at the thought that the hot lowlands were at last behind us.

At six in the morning on Friday, 15th May, Hans Ertl, Walter Frauenberger and Hermann Buhl set off for the permanent Base Camp with porters and loads. I accompanied them as far as the moraine. On the way down I met Albert Bitterling and Hermann Köllensperger who were likewise ascending with loads. Back in Camp, I first of all had a thorough discussion with Fritz Aumann about arrangements for the distribution of clothing to the Hunzas, then I organized my medical supplies so as to have essentials ready to hand in case of emergency. After that I settled down in front of my tent to write up my diary, before me the gigantic ice precipices of Nanga Parbat. From the interim Base Camp the eye could roam freely from Silver Crag to the right to the Diama Gaps and then over to the 19,700 foot high Ganalo Peak. In the light of morning the mountain gleamed in purest silver and the sheer dazzling ice of the north-east wall held the eye in spellbound fascination.

In the afternoon, Fritz Aumann, our Base Camp Commandant, aided by Walter Frauenberger, attacked the job of distributing equipment to the Hunzas—pullovers, anoraks, trousers, shirts, socks, pants, balaclava helmets and headbands—an occasion for great rejoicing. The ice-axes were a source of special pride. Hans Ertl had just prepared to film the scene when the sun went in and frustrated him. This was characteristic of the prevailing weather; the sky would usually become overcast around midday and in the afternoon would be obscured by heavy rain clouds. And once the sun was veiled it would become shudderingly cold. The distribution occupied the whole afternoon and when it was completed the Hunzas arranged themselves in groups and, to the strains of a four-piece native band, performed for our benefit a dance of joy. The jerky but quite graceful movements were executed with pride and abandon. The band consisted of two clarinet-like instruments and two drums, and the more shrill the sounds emanating from the wind instruments the more orgiastic became the dancing. Clad in their new gay pullovers, balaclava helmets and long white underpants, their shirt-tails flapping and the newly acquired climbing boots on their feet, the Hunzas were a gorgeous sight. They even went so far as to put on their puttees, a quite superfluous refinement down here on the greensward.

At 6 o'clock on the following morning (16th May) Walter Frauenberger and Hermann Buhl were already on their way up to the permanent Base Camp with about twenty Hunzas. Köllensperger and Albert Bitterling followed soon after with their own loads. When I started off on my own at 9 o'clock to take a look at the site and carry up the essential medical supplies, the weather was still holding although it had already clouded over somewhat. The signs were that it was about to break.

My way from the interim camp to the permanent site led first past birch and tuja trees and followed a stream fed by the Ganalo glacier. After about twenty minutes I ascended eastwards across the marginal moraine of the Rakhiot glacier, following the glacier upwards until, after about one and a half hours' climbing, I arrived at the small moraine. Making my way across these wild boulder-strewn screes, with the blue-white walls of the 26,000 foot peak above me radiant in their purity and splendour, I felt that down here at 13,000 feet I was still moving on all too earth-bound a plane and that even in this

Himalayan solitude God's purity and sublimity were fully manifest only high up there amid the eternal snows. I felt as I stood there that my brother and his dead comrades could have no more beautiful tomb than the silvery white east ridge of Nanga Parbat.

On my way to the moraine I met the Hunzas descending from Base Camp led by Hermann Buhl and I could see the other three comrades further to the east taking a direct route down the moraine. Shortly afterwards I was standing for the first time—and quite alone—on the moraine mound at Drexel's graveside. Above me gleamed the Silver Plateau while before me a salvo of avalanches thundered down the north-east face of the mountain. Obliquely below I could see the beginnings of our Base Camp and immediately in front of me was the modest memorial which the comrades of 1934 had erected on 8th June to the everlasting memory of their much loved fellow climber "Balbo". My thoughts were with Drexel's parents and with my brother as I read the words on the decaying cross of bronze:

ALFRED DREXEL 1900-1934
Solus cum Solo

On the reverse side I read the following words:

> "We thank God that you were one of us, indeed that you are still one of us, for in God all life is eternal and he who returns to the Lord is still in the family."

I was deeply moved by the humility of these devout and simple words which I imagine had come from Drexel's parents. I photographed the grave and gathered a few buds from the plants which covered it to take back to the bereaved family.

While I was still making my way from the grave down the path of sorrow trodden by the grieving comrades of 1934 the sky darkened, mist gathered almost instantaneously in the Rakhiot valley, and in no time I found myself caught in a violent snow storm. I went on down to the site of the permanent Base Camp but as yet no tents were in position and I found only a number of sacks and ski-sticks and skis stacked up under a rock. I quickly stuffed my bandages and drugs into one of the sacks and then, despite the worsening weather could not resist the temptation to put on brother Willy's old Marius-Erikson skis for a while and execute a few turns. How I wished that Willy, now twenty years buried in the ice of Nanga Parbat, could see me! I arrived back at the interim camp at about 1 o'clock, just in time for lunch.

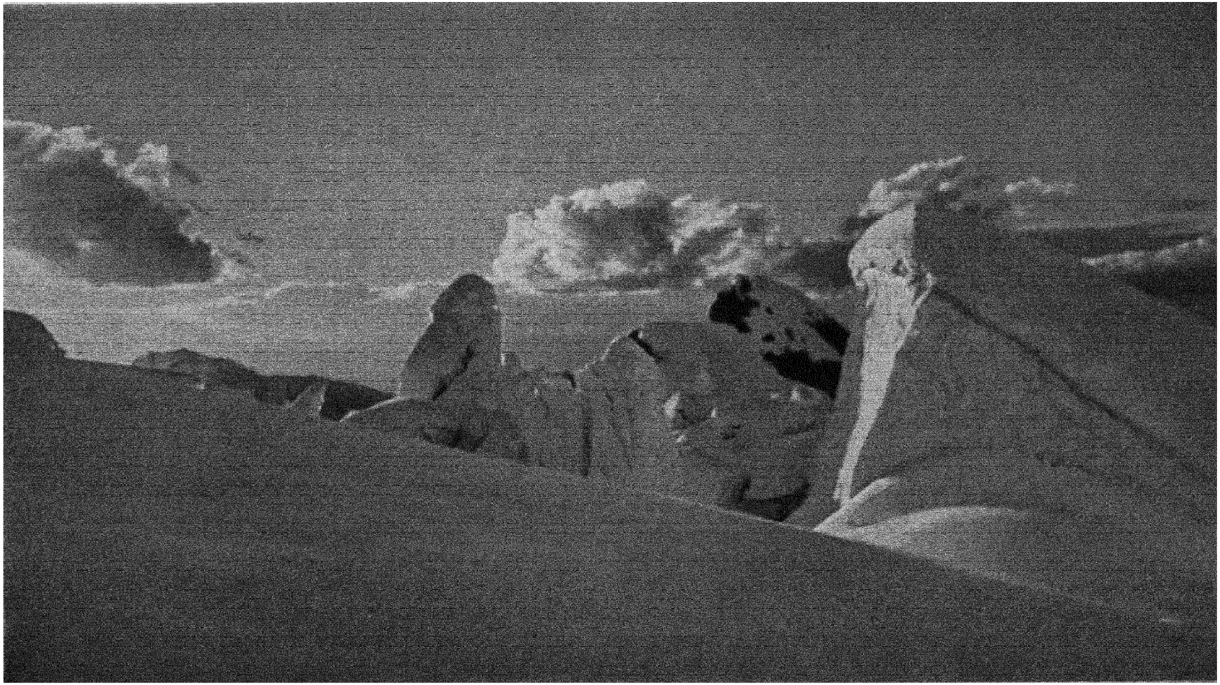
It was our idea that the Hunzas should carry up another consignment in the afternoon, but they would have none of this. As discussion developed, Rhabar Hassan, a police officer from Gilgit who acted as our liaison with the Hunzas, translated: "The Hunzas refuse to carry for a second time to-day. It is true that they promised Allah and their wives to help the Germans, but they also pledged themselves not to overtax their strength and to perform only one big task per day." Allah was obviously a practical institution. When I insisted that they must go up once more they ostentatiously removed their pullovers, anoraks, boots and various other garments and struck. Hassan knew it was all bluff for it was quite clear that the Hunzas could not simply down tools and go. As already recorded, they had set off from their homes with great ceremony and with the express purpose of protecting and aiding us, and if any of them returned home now without apparent reason and with no testimonial from me, they would be put under arrest at once and sentenced to forced labour. However, so much time was wasted in argument that in any case a second ascent to Base Camp that day was no longer feasible. The Hunzas had got their way.

The same afternoon Fritz assembled one of our two radio sets. We tuned into various wave-lengths in search of some good music and at 5 p.m. the United Nations transmitter in Rawalpindi came through with a special weather bulletin for the Nanga Parbat Expedition. We could just about understand the word "cloudy", and this we were quite willing to accept as it had been snowing steadily all the afternoon. At night I switched on the radio in my tent and amidst a babel of Indian and Pakistani I picked up the B.B.C. news from London. It mentioned the British Everest Expedition, a matter of great interest to all of us and I made up my mind to listen in more frequently from then on.

The radio was now our one and only contact with the outside world, for the postal arrangements had still failed to function. Obviously our mail must have been held up somewhere. I decided to make representations to the Embassy in Karachi, to the Ministry for Kashmiri Affairs in Rawalpindi and to the postal authorities in Gilgit, for we had been without any news whatsoever since 1st May. Naturally we wanted to read the press reports and know how our countrymen were reacting to our progress on the mountain, and we were anxious for family news, and news of the outside world in general.

Our first Sunday at the interim Base Camp (17th May) began inauspiciously with rain and snow, but as it happened it was to be a great day for us all. At 8 a.m. some porters came up from Tato with the news that a strange Sahib had arrived in the village. And within a quarter of an hour who should be standing in front of our tent but Peter Aschenbrenner himself! His arrival was heralded by the rolling drums and shrill piping of a village band. Peter was in excellent form and looking like an Englishman on safari in his shorts and topee. I was delighted that he had, in response to my pressing cable, been able to leave earlier to fit in with our accelerated approach. And now, here he was, Peter Aschenbrenner, the man who understood all the problems and cares of an expedition such as this and who knew the ground like the palm of his hand. He had left home on the Monday, and now after only six days he was with us on the mountain. A few years back one needed a minimum of four weeks to cover this enormous distance. Now one can fly to Karachi in thirty-six hours and, with good connections, be in the heart of the Himalaya within three days of leaving Munich. It is an open question whether such technical achievements are always to the good from the human standpoint, and for my part I appreciated the long sea voyage for the opportunity it gave us to get to know one another and to shake down in each other's company.

Peter's arrival had a wonderfully bracing effect upon the whole camp. It had been noticeable back home that an atmosphere of quiet confidence had prevailed in all the preparatory work in which he had acted as advisor. And now again, even



The sentinels around Camp II, 300-foot ice towers in the ice-fall of the Rakhiot Glacier

within a few hours of his arrival, Peter's sound knowledge of all the vital aspects of the expedition had a reassuring effect upon everyone.

We at once got down to the discussion of fundamental questions; a second large tent was erected, orderlies allocated and a time-table worked out for the transport of loads. It was not until all this had been accomplished that Peter, prodded several times by Walter Frauenberger, unpacked his rucksack and produced a pile of letters and parcels, but it was still some time before I got down to reading mine.

All that afternoon I lay in my tent writing up my diary. Meanwhile Peter and Fritz Aumann were busy transforming the second large tent into a communal mess. A row of crates were pushed together to make a long centre table while sacks stuffed with some of the softer items of our equipment served as seats. Hans Ertl had in the meantime returned from his reconnaissance at the site of the permanent Base Camp and on his way down had met Albert Bitterling and Walter Frauenberger who were moving up there to-day. Within a few days the interim Base Camp would be evacuated and the flags of Pakistan, Germany and Austria would be flying above our permanent Base Camp.

Heavy wet snow had continued to fall all through Sunday but in the evening the weather began to clear. Snow was now lying down to 12,000 feet. At 9 o'clock we were still deliberating in the mess tent, examining and re-examining the whole question of equipment for the high altitude camps. Peter was bristling with energy. It had turned cold and the others were already asleep when Peter and I at length parted company and, with the help of torches, groped our way through the slush and darkness to our respective tents.

During the night Peter was forced to the conclusion that our sleeping-bags were inadequately padded, a fact which the rest of us were ready to confirm from our own experience. Accordingly various experiments were made in the course of the next few days with a view to making good this defect. Kuno Rainer turned tailor and sewed himself, and me too, a sack from a camel-hair blanket which was then fitted into the big sleeping-bag.

Ertl unpicked his small sleeping-bag with professional skill and sewed it on to his big one to make two layers. Otto Kempter adopted the simple course of fitting his smaller sleeping-bag inside the bigger one, a solution which ultimately proved to be the best for the high camps, the more so as the cavity between the two down bags was a useful place for stowing away boots, socks and pullovers during the night and thus protecting them from cold and frost. This improvisation taught us a useful lesson and we resolved that for future Himalayan expeditions we should have our sleeping-bags made in two pieces which would comfortably fit together.*

Through the good offices of the Tassildar from Chilas we were able at 7 a.m. on the morning following Peter's arrival (18th May), to enter into negotiations with the men from Tato for the transport of our loads up to the permanent Base Camp. The talks took place on a magnificent meadow with the north-east face of Nanga Parbat and Ganalo Peak as background. Knips, Peter and I were there to watch over our financial interests and when the coolies had been paid the last instalment of the money due to them for their transport from Talichi to the interim Base Camp, agreement was reached on the basis of five rupees for each ascent. Then, when all the Tato men had been given eye-drops as protection against snow-blindness and other injurious effects of ultra-violet radiation, they were ready for the ascent to the glacier zone. Köllensperger, Kempter, Rainer and Rhabar Hassan set off soon afterwards. We had planned that a further two hundred loads should be transferred to the permanent Base Camp that day and fifty of the porters would have to make a second ascent in the afternoon.

The morning had been fair with an early temperature of −3° C. and the day had later turned beautifully warm. Towards noon, however, the sky was once more overcast and Fritz Aumann and I wandered along to the Rakhiot stream to take a dip while there was still some warmth in the day. On our return we found the last fifty porters waiting for Aumann, for as Camp

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* The Everest Expedition had adopted the same design as a result of trials carried out in the Alps. Each climber had an inner and an outer bag of down, the fabric of which was nylon.

Commandant he was responsible for all matters of transport. We were barely in camp again before the first heavy drops of rain had begun to fall and it was teeming down as the Hunzas returned from Base Camp. While some of the men selected suitable burdens for their next ascent from the great pile of loads, and subjected every sack or crate to a thorough-going scrutiny for weight and size, others prepared to slaughter the mountain goats which had been purchased on the previous day. The animals were first tethered by their legs and then despatched according to ritual by the slitting of a main artery, an operation which our Hunzas performed with great skill.

It was on such an occasion of ritual slaughter that I witnessed a heated argument between the Hunza porter Chola-Beg and one of the Tato men. One maintained that a slit in the upper region of the larynx was the correct method according to the Faith; the other protested that an incision just above the collar-bone, i.e. through the wind-pipe, was the only true ritual method of slaughter. The argument flared up into a row and Chola-Beg was already inciting his fellow-villagers to refuse to eat meat which had been wrongly slaughtered. With the intervention of our good friend Hassan I laid down that, irrespective of whether the beast was slaughtered by a Hunza or a Tato man, the knife should be inserted just below the larynx. This compromise seemed to satisfy both parties.

When the goat has been slaughtered the carcase is drawn, the bowels being cleared by blowing through them with the mouth; then the whole beast is roasted over an open fire. This was no special delicacy for us, but for the Hunzas, after the meagre days of the approach route, it added welcome variety to the daily diet of chapati. This, the staple fare of many Pakistanis, consists of flat cakes or loaves prepared from coarse barley-flour, the so-called "ata", with the addition of salt and water. First the flour is mixed into a dough, then it is kneaded between the palms into flat loaves which are then baked on hot stone or, if available, on a hot metal plate. The Hunzas eat their chapatis hot or cold, with tea, milk or, on highdays and holidays with goat meat—but always they eat chapatis. The cold cakes are first dipped into liquid rancid butter, called "ghi", made from goat's milk which is simply poured into a hole in the ground. Over a period of months and even years, the water content evaporates and the solid constituents of milk, fat and casein combine to make a firm crumbly substance. It is not surprising that the "ghi" has by this time acquired a strong and penetrating effluvium, and if any of our plastic utensils ever came into contact with it they became from that moment quite unusable as far as we were concerned.

After my consulting hour, which had been fixed for 5-6 p.m., the weather suddenly cleared and high up on the rocky crest of the northern Jiliper Peak a number of ibex could be seen silhouetted against the sky. Peter's hunting instincts were immediately aroused and the Hunzas were wildly enthusiastic that the Shikare- or Huntsman-Sahib should stalk them. But Peter had not yet tried out his gun and so was unable to make use of this unique opportunity—for so it turned out to be.

As night fell and the Hunzas fed the fire with dry branches we settled down to another hour's deliberation. Peter picked up the thread from the evening before, discussed matters of equipment, told us of his experiences on earlier expeditions, talked over his plan of attack, pin-pointing possible difficulties. We wound up with a few mountaineering songs, feeling full of confidence and in good heart. On the way back to my tent, having bidden the others good-night, my gaze was arrested by a peculiarly impressive and beautiful sight. Hassan had set up his cookhouse under a huge rock and had laid upon it a roof of green foliage. With the hood of his red anorak pulled down he was squatting before the fire with his boy and one of our Hunzas. The glowing colours of the anoraks, the leaping flames which cast a reddish tint upon the snow, the rock and the garlanded roof, looked like a Christmas crib framed in the velvety darkness of the night.

On the morning of 19th May, a Tuesday, all the tents were covered in several inches of newly-fallen snow and some of the larger ones had actually collapsed beneath its weight. As a precaution against any future mishaps of the sort Peter ordered that wooden props should be inserted into the light tubular metal poles provided for the high-altitude tents. In the course of the day all the tents had to be cleared of snow over and over again; we also buttressed them up with thin tree trunks. Because of the weather we spent practically the whole day in the mess tent, Fritz Aumann only remaining outside to make ready the loads which were to be carried up to Base Camp as soon as the weather permitted. Walter Frauenberger and Albert Bitterling had already moved in at the Base Camp proper and were busy consolidating there.

On the following morning the Tassildar from Chilas took leave of us together with his two adjutants. In recognition of his assistance we promised to let him have a tent with all accessories on our return journey, and the adjutants two sleeping-bags with mattresses, which greatly pleased them. This promise was duly fulfilled on our return to Gilgit. Meanwhile, as a memento, I gave the Tassildar a watch together with a small hold-all containing essential medicaments for everyday use. Then once more in gratitude we shook his brown hand and watched him, followed by his aides, set off proudly in the direction of Tato to the ghastly strains of the ubiquitous four-man band. His function was now taken over by Rhabar Hassan who was to ascend with us to Base Camp and remain there until the conclusion of the expedition.

Knips's leave would soon be up now and he was to depart in the afternoon of 21st May. Everyone became frantically engaged in letter-writing as he was to take our mail with him. With Knips we lost a man who by reason of his personality and his linguistic abilities, had been of great value to the expedition. Three Hunzas were to go with him as far as the Rakhiot Bridge but he intended that night to pitch his tent in Tato.

I now suggested that Hans Ertl and Fritz Aumann should pack up and move into Base Camp on the following day to join Walter Frauenberger and Albert Bitterling. That evening I was alone with Aumann in the mess tent until 10 o'clock talking over those problems of human relationships which loom so large when, as in a Himalayan expedition, a small group of men of widely divergent character are thrown into unique contact, the closeness of which is unnaturally accentuated by their isolation.

The gleaming silver of the hanging glaciers and ice-falls of the north-east wall enticed us early from our beds on the following morning, Friday, 22nd May. There was a feeling of *Föhn* in the air and the uncannily beautiful light of early morning played strange tricks with the vision, making the contours of rock and mountain seem unnaturally sharp and deceptively close. Even Peter Aschenbrenner, old Himalayan hand that he was, was clearly affected by the spectacle and remained long absorbed with his Leica. But the sunshine was not to last. Hardly had we emerged from our daily ablution in the ice-cold Rakhiot stream than dark clouds began to gather; in the twinkling of an eye rain was falling steadily which in a few minutes turned to dense driving snow. Our Hunzas were to cover the journey to the Base Camp twice during the day but naturally there would be nothing doing without some baksheesh. I therefore promised them twenty cigarettes for the second journey and a third of a bottle of *Schnaps* each, which would be issued at the Base Camp proper when the expedition was finally installed there. Even so, in the afternoon a few of the Hunzas complained of their feet and only fifteen of them carried up another load. By this time the weather had improved so much that they were able to make the second ascent without getting wet.

Our weather man, Albert Bitterling, made the following observations:

"From as far down as the Indus valley it was possible to observe that the massif of Nanga Parbat was subject to certain regular daily phenomena. After mostly slight cloud formations, sun, good visibility and a cloud-free summit field in the mornings, heavy convective clouds would appear usually from about 9.30 onwards which gradually enveloped the mountain massif in an altitude of 16,500 to 23,000 feet. The same phenomena were observable to the north in the Karakoram in the Rakaposhi-Haramosh-Masherbrum Range. Either between 1 and 2 p.m.

or between 5 and 7 p.m. moisture was precipitated first in the form of soft hail, shortly afterwards as snow. These periodic downpours were of the character of showers and were not copious. A period of bad weather between the 17th and 22nd May produced nightly snow falls of between 30 to 40 cm, but even during these six days there were brief fair spells, chiefly in the early morning hours and shortly before sun rise.

"Temperature conditions within the range of the Base Camp weather station at 13,000 feet could be described as almost constant. The daily fluctuation averaged 5° C. Sun-radiation was considerable and increased in the higher camps, so that, for instance, in the ice-fall between Camps I and II, i.e., between 14,600 and 17,400 feet any mountaineering work was impossible between the hours 10 a.m. to 1 p.m.

"To sum up: Weather conditions were on the whole reliable in the morning until 10 a.m. Disturbances occurred at midday and in the evening with some regularity. Whole days of sunshine seemed to be exceptions."

And so the morning came when our interim Base Camp was finally evacuated and it was time to bid farewell to the valley. Peter went on alone two hours ahead of the main party. He was not yet fully acclimatized and was anxious to avoid undue strain. We others had been able to adapt ourselves fairly gradually but Peter had in the space of one week been transplanted not only into a subtropical zone but a subtropical zone at an altitude of 13,000 feet. This was one definite disadvantage of the quick passage by air. However, by the beginning of June, Peter had become fairly well adjusted and when I met him again in the second half of June in Camp III he was in really excellent form, especially considering that he was already in his fifties.

On the way up my thoughts were occupied with the transport of loads to the first high altitude camps. The most important point was to make a well considered selection of absolutely essential loads from the many items of our equipment. We also had to decide on the best time for setting up the high camps which must not be left too late, although there was little fear of this in our case. On the other hand we must not be tempted to make a premature start, as with the unstable weather of the moment this could involve waste of time and energy. Furthermore the number of climbers to go up to the highest camps must be kept to the absolute minimum consistent with safety, for every man up there meant additional transport of food, tents, medical supplies, oxygen cylinders, etc. From the beginning of June onwards, that is to say within one week of our evacuation of the interim camp, the expedition would enter into a decisive phase. We were all agreed that an all-out effort should be made to conquer the summit at the first attempt, which should be made at the end of June or in the first days of July. Therefore every detail of the assault would have to be planned and prepared in the intervening period so that there would be nothing to prevent us from taking full advantage of an unexpected spell of good weather when the time came. All future decisions would now be taken in a council of four consisting of Peter Aschenbrenner, Walter Frauenberger, Hans Ertl and myself. It was stimulating now that we were actually at grips with our task to be able to take decisions and act upon them to the best of our knowledge and ability without the interference we had had to suffer during the period of preparation at home. Every day brought its own responsibilities and its own problems to be dealt with, and every day's work successfully accomplished in co-operation was one more milestone on the road to our common achievement.

We had long since lost all sense of time. Walter Frauenberger and I were, I think, the only ones who ever had the day and the date firmly fixed in our heads. As far as I was concerned this was a direct result of having to write up the expedition's logbook every day. At home they would shortly be celebrating Whitsun, but I was pretty sure that not one of us would even remember it, so completely were we absorbed in the job in hand. However, although it seemed the natural thing to ignore the calendar, the nearer we got to our objective the more preoccupied I became with dates and times, trying to work out on the basis of my study of the meteorological tables for the past ten years which few days would be the most propitious for our

Pitching tents in Camp III (old Camp IV/1932-1938)

assault. During the three weeks between 5th June and 6th July there had usually been at least one period of favourable weather, and now all my hopes and the results of the long months of planning and preparation were focused on this short span of time. So many of our countrymen had died so tragically here in the past that Nanga Parbat had become known as the Mountain of Terror. The time had come to strike a balance with Fate. Surely the gods of Nanga Parbat must now be sated with sacrifice? Or were they indifferent to our fears and our aspirations? None could tell.

I was in a pensive mood when I reached Base Camp at about 4 p.m. having overtaken Köllensperger and Kempter who were leading the porters up. Albert Bitterling was already having my tent site levelled on the highest point of the moraine mound a few yards away from Drexel's grave. His own tent was pitched next door. Peter waved a greeting from the rock over on the right and below us lay the main site where the larger tents were already in place. The evening was spent in that blissful sort of fellowship known probably only to mountaineers. Our indefatigable Ertl put in hours over the Primus concocting an epicurean potato *Schmarrn* and when we had also imbibed suitably in honour of the achievements of the day, we turned in.

And so, overjoyed at being at last at Base Camp, 13,000 feet up on Nanga Parbat, I slept round into Whitsunday (24th May) of 1953 which is a day I shall remember as long as I live.

CHAPTER IV

The First Assault

IN THE MORNING the camp was covered in sixteen inches of new snow. We had a full day in front of us. The big tent had to be made into a store. Peter Aschenbrenner, Fritz Aumann and their helpers had nailed together a number of packing-cases and erected an excellent row of shelves on which our food supplies could be methodically put away. Crates were stacked in the centre of the tent to form a table, while smaller cases served as chairs. The corner to the left of the entrance became our cooking recess. And while some of the Sahibs were still busy with their own tents on the moraine mound, the large communal tent for the porters was put up on the site below. Thus the whole day was given over to an orgy of carpentry, unpacking and removing.

After our midday meal I walked with Albert Bitterling up to the memorial pyramid on the moraine of the Ganalo glacier. This was presumably erected in 1938 by friends of those who had in previous years lost their lives on the mountain. Accordingly it bore two tablets, one for the 1937 team of the German Himalaya Foundation, the other for the dead of 1934. The first was richly inscribed and cemented in permanent fashion into the stone pyramid. The other appeared to have been an afterthought, for it was not an integral part of the memorial but was merely propped up against it and bore nothing but the bare names of the dead comrades of the 1934 expedition.

Our domestic activities extended well into the afternoon. Fritz Aumann tested out his power unit; the motor roared and rattled away and the whole valley reverberated with the uncouth sound. But everything was in order. Another event of the day was the arrival of our mail which had been travelling along the Indus valley for three weeks. Our own post-bag was to leave by mail-runner at three in the morning and at 9 p.m. we were all in our tents writing letters by candlelight. It was a lovely moonlit night.

The morning (Monday, 25th May) showed every sign of an impending change in the weather. I was out soon after 4 a.m. and made my way up to the great moraine mound. I was standing on top of it and had just measured 14,745 feet with my altimeter, when a medium-sized snow-dust avalanche broke away from the ice-fall of the Silver Plateau and thundered down right in front of me. It took just on three minutes to drop the ten thousand feet before fanning out on the glacier below; then it continued away down the Rakhiot valley as a cloud of ice. I could feel the blast even where I stood and for a few minutes my trouser legs flapped in the breeze. Then all around me was still once again. I retraced my steps and arrived back in time for camp breakfast.

This day we planned to get a number of smaller jobs done. Fritz Aumann and Albert Bitterling made an inventory of our food stocks. The Hunzas manufactured the wooden props which were to reinforce the tubular metal tent poles. Peter and the three young chaps went over the sleeping-bags, tents and crampons to see that all were in order. Fritz levelled out a new tent site for himself, assisted by my two orderlies Isa Khan and Madi. Meanwhile the weather had further deteriorated and the peaks encircling the Rakhiot valley—Buldar Peak, Chongra Peak, Rakhiot Peak and the peaks of Nanga Parbat itself—were wrapped in dense cloud. Our tents rattled and shook in a strong wind. Albert Bitterling, our meteorologist, had predicted this change in the weather on the previous morning. In any event it would be unwise to begin work on the higher camps too soon, as considerable falls of snow could still be expected up to the end of May. We decided therefore to continue for the moment with the work of preparation and reserve our united strength for the setting up of the higher camps until the end of the month.

On Tuesday, 26th May, it was decided that Camp I should be established that day near the foot of the Great Ice-fall at an altitude of 14,745 feet. On Aschenbrenner's advice it was to be placed behind a huge rock as a safeguard against avalanches. Before setting off on this the next stage of our enterprise we all swore a sort of Olympic oath. As leader of the expedition I read out the following words which were then repeated by all the team: "We pledge ourselves to be honourable contestants in the struggle for one of the highest peaks on earth, to respect the laws of comradeship, and not to spare ourselves in the attainment of our high objective, to the glory of mountaineering the world over and to the honour of our country." The ceremony, which was concluded with a triple *Berg Heil,* was filmed by Hans Ertl.

The porters were to start off with their loads at 9 a.m. but for the second time they went on strike, demanding more clothing, still more food, more pay, the issue of spare clothing such as extra shirts, socks and underwear, as well as the reduction of their loads from 28 to 18 kilogrammes. I immediately ordered them to remove all their clothing and other equipment and pile it in a heap. I then dismissed them. Five of them took to their heels and fled barefoot over the snow back to Tato without even waiting for the pay which was due to them. They would now rank as deserters in their native villages, but obviously they had been scared of the mountain. They had enquired more than once if their families would get their clothing if they died. Hassan advised me to give the others rather more to eat—for they could put away vast quantities of food—and then everything would be in order. They were really like children and I made them apologize to me in person before I would take them back into the ranks of the high altitude porters. One of them was reduced to tears as he fought to overcome his feeling of shame.

The loads had in any case to be rearranged and it was a comparatively simple matter to reduce them to the required weight in the process. But the demand for more clothing was quite nonsensical for they were accustomed to running around the whole time at Base Camp in shirts and underpants and, as it turned out, in the high camps too for that matter. Negotiations dragged on past midday and then I demanded a decision. Eventually nine porters all from the same village as Hassan, declared themselves willing to carry up to Camp I. At 2 o'clock Otto Kempter and Hermann Köllensperger went ahead with Peter to make the trail. The nine porters then proceeded to Camp I and later in the afternoon Hermann Buhl and Kuno Rainer, who wanted to dig themselves in up there, followed with their personal belongings. But once more we were foiled by the weather. It began to snow and in the evening everyone was back at Base Camp again.

The young Lambadar, or mayor, of Tato arrived on a visit and brought us some eggs. I took the opportunity to ask if he could arrange for ten to fifteen Tato men to come up on the following day to carry loads at least as far as Camp I. He agreed to try and said we should have news from him by 4 p.m. on the morrow, Wednesday, 27th May.

Soon after 7 p.m. everyone had disappeared into the snow-covered tents. I stayed up in the large tent until ten writing letters of thanks to all the members of the Council and listening in on our portable radio. The news came through from Rawalpindi that the American expedition under Houston's leadership had arrived at Skardu to tackle the 28,245 feet high Chogori (K2), the second highest mountain in the world. It was further reported that the German Himalayan expedition was now established on the Rakhiot glacier.

On the morning of Thursday, 28th May, Hans Ertl took his smaller film camera up to Camp I and I followed on after some time. From the Camp we watched our two Tyrolese comrades, Buhl and Rainer, trying to prepare the trail through the Great Ice-fall of the Rakhiot glacier, a veritable maze of crevasses. It might have been an advantage if we could have directed them by signals, as the best way through was often more easily discernible through field-glasses from the Camp than it could have been at close quarters. As it was they seemed to be courting unnecessary difficulties and losing valuable time. They had started at 3.30 a.m. and by about 7 a.m. had worked their way up only approximately one-third of the gigantic ice-fall; it seemed doubtful whether they would succeed in getting through to the site of Camp II near the so-called *Lagersporn* (or camp spur) in one day's work.

On my way down to Base Camp again I met Albert Bitterling ascending with a column of porters. I found on my return that Fritz Aumann had got a line of porters on parade in front of the store tent and that lighters, field-flasks and boot-cleaning equipment were being distributed. Peter had just returned from the hunt, empty-handed alas, and he and Walter Frauenberger were photographing the parade. This, as usual, was enough to send these artless children of nature into fits of merriment but we Sahibs remained unaccountably gloomy all day.

In due course Albert Bitterling reappeared from Camp I with the news that Kuno Rainer and Hermann Buhl had given up at twelve noon having succeeded in covering only thirteen hundred feet of the three thousand feet of the Great Ice-fall and had returned to Camp I towards four in the afternoon totally exhausted. The condition of the snow had been so bad that it had given way in several successive jerks at each step. Our spirits, already low, sank to rock-bottom. Our sole comfort was that after supper Fritz Aumann at last got his Magnetophone record-player going and we were able to arrange a grand gramophone recital: extracts from Tschaikovsky, parts of Schubert's *Winterreise* sung by Schlusnus, some movements from Beethoven's *Eroica* and finally some gay Landler by Freundorfer. For an hour or two I was able to forget my worries.

There was indeed plenty to worry me. My main concern was our slow rate of progress. The Sherpas had still not turned up and we had only fifteen Hunzas at our disposal. I had been promised another fifteen Tato men but so far only two had arrived.

It was my plan that Otto Kempter and Hermann Köllensperger should continue trail-making in the ice-fall on the following day, Friday, 29th May, and that on the Saturday

Albert Bitterling and Walter Frauenberger should push on finally to Camp II. I had all along been very well pleased with our progress, but now suddenly I grew restless at the thought that the time was slipping by and so little was being accomplished. However, our new thrust was now under way and I hoped that we should be able to exploit the good forenoon weather to the utmost.

At 2.30 a.m. on 29th May I roused Otto Kempter and Hermann Köllensperger. They went on sleeping, however, and did not finally get away until 6 a.m. Hans Ertl went up soon after them as he wanted to photograph the ice-fall. Peter followed later and at 8 o'clock the porters set off, led to-day by Fritz Aumann. Albert Bitterling and Walter Frauenberger spent the whole morning getting their things ready for the high camps. Walter Frauenberger was the "Uli Wieland" of 1953; he liked to get things organized and was never idle. The crates which had been stacked in front of the large tent, earmarked for Camp III, were now on their way to Camp I and seven members of the team were actually up at Camp I although there was as yet not much doing there. And so, for the first time, life in Base Camp had subsided a little and it seemed deserted, at any rate until the evening came round.

Meanwhile the men had arrived from Tato and would be ready at 5 a.m. next day to start carrying loads up to Camp I. That meant that we should soon have an imposing convoy of ten Hunzas and twenty Tato men ascending the snow-covered slopes of the Great Moraine to the glacier. All the men from the Rakhiot valley tackled this three-hour march barefoot. The soles of their feet had become so hardened and horny that it would probably be some time before the cold would penetrate, but even so we shuddered at the sight.

Before their departure the Hunzas assembled for prayers in the space in front of the mess tent. Hassan led the prayers in solemn sonorous tones and all those gathered about him were devout and reverent in their bearing. There followed Zindabads for Pakistan, Germany and Herrligkoffer!

On the 30th May at 3.30 a.m. our four youngsters (Hermann Buhl, Otto Köllensperger and Otto Kempter, led by Kuno

Rainer) had left Camp I to seek by means of laborious trail-making, a way through the labyrinthine crevasses of the Rakhiot Ice-fall. This time their striving was not in vain. Around midday the Hunzas brought a note with them down to Base Camp from Camp I to say that our shock troops had made good progress and were at 9 a.m. resting at a point about 300 feet below the "Vajolet Towers". These so-called Vajolet Towers are *séracs* about 250 feet high on the first tier of the glacier, the site earmarked for Camp II. I further learned from Hans Ertl on his return to Base Camp at five in the afternoon, that the four lads had pushed on to the Camp II site, had turned back at noon after an hour's rest and had arrived back in Camp I at 4 p.m. They were pretty well done in after their gruelling time knee-deep in snow in the glaring heat of the glacier.

At 3 p.m. we sent the first batch of Hunzas with loads and bedding to Camp I. The idea was that they should spend the night there and go up to Camp II with the four young ones as early as possible on the following morning. They took with them a letter from Peter in which he asked the two Tyrolese (Kuno Rainer and Hermann Buhl) to stay in Camp I and to go up to Camp II with the porters the next day. But while the porters were moving up the moraine near the Base Camp they ran into Kuno Rainer and Hermann Buhl coming down. On reading Peter's letter Rainer turned back while Buhl continued on to the Base Camp. Walter Frauenberger thereupon volunteered to make up the fourth and went up to Camp I late that same evening.

In the afternoon we received a consignment of six hundredweight of "ghi" transported from Tato on the backs of some small grey donkeys. The little fellows stood outside our encampment, waggling their ears as they waited to be relieved of their burdens. Then they spent the rest of the day grazing and frolicking around the camp. The silence of the mountain world was shattered by their noisy braying as they chased each other at the gallop over the greensward.

The "ghi" had now to be weighed off. But how? That was the question. Our spring balance was quite unsuited to the purpose. The Tato men had brought a pair of scales with them but there were no weights. We had to improvize a large weight of roughly ten Sir (1 Sir = approx. 1 Kg.). So we put 88 rupee coins corresponding in weight to 1 Sir on one side of the scale and used these to weigh stones of appropriate size to make up the required weight. After one hour's experimentation on these lines we could set about weighing out the "ghi".

Towards evening there was every sign of another impending change in the weather. The wind was coming from the south and the next morning was abnormally warm. Heavy mists which on the previous day had enveloped the Indus valley were creeping up the Rakhiot valley and soon we found ourselves in the thick of a full-scale snow storm.

On the following day, 31st May, Kuno Rainer and Hermann Köllensperger stayed up in Camp II while Walter Frauenberger took the porters back through the ice-fall to Camp I. The route through the ice-fall had now to be made safe for the porters by means of rope ladders and fixed lines. During these operations Base Camp was able to keep in constant touch with the spearhead group by means of the excellent Telefunken walkie-talkie apparatus.

Going up from Camp I, the ascent route first led through a small but tricky glacier maze. With porters one needed a full hour for this comparatively short section. Only after this had been negotiated did the trail start to ascend. It led to the right and passed close to an avalanche course down which swift avalanches of ice plunged from time to time, breaking from a relatively short slope. Each time this happened clouds of pulverized ice would obscure the sun for minutes on end, and any men who happened at the time to be in the ice-fall would disappear beneath a crust of ice and would remain huddled and invisible while the icy spray, avalanche-driven, swept over them. Above this avalanche corner the trail twisted in thirteen serpentine loops between gigantic green-glinting *séracs* through the so-called *Wintergasse*, and ascended steeply to a small plateau from whence, after negotiating a few extremely wide crevasses, the tents of Camp II came into view right in the middle of the ice-fall.

It was on this route which had in many places to be secured for the porters by means of fixed ropes, rope-ladders and wooden bridges, that the Hunzas received their baptism of fire. Here it was that over a period of three weeks our supplies travelled up to Camp II on the backs of the Hunzas under Albert Bitterling's supervision.

Glacier movement was so marked here that every day one had to reckon with some fresh surprise on the trail. Here would yawn a new crevasse, there a *sérac* would have crumbled, and at another point an avalanche would have completely obliterated the labour of days past. It was small wonder that the stretch between Camps I and II became the *bête noir* of Sahibs and porters alike and that we all heaved a sigh of relief when the work of provisioning the high camps was at length completed.

Camp II, situated at 17,400 feet, that is almost as high as Elbrus in the Caucasus, was known to us from previous expeditions as being the most dangerous camp on Nanga Parbat. It stood amid the *séracs* of the Rakhiot ice-fall with yawning, seemingly bottomless crevasses criss-crossing in every direction between the tents. It was probably the most impressive and the most beautifully situated camp on the mountain. From the site it was possible to survey the lower section of the ascent route to Camp III. Above the rugged second ice-fall, which obstructed the way from the camp to Rakhiot Peak with an impregnable rampart of gigantic *séracs* and crevasses, one had an uninterrupted view over the continuation of the route along the westward traverse to Camp IV (21,980 feet) below the pyramid of the Rakhiot Peak (23,196 feet) high above, and one could with field-glasses follow closely all assaults on and beyond the Rakhiot Ice-wall.

On 2nd June Albert Bitterling was ordered by the Chief of the General Staff—as he put it in his diary—to move up to Camp I. He was, on the following morning, to take eight porters with loads through the Great Ice-fall to Camp II. As things developed Albert was to become Commandant of Camp I. With untiring devotion he went altogether sixteen times through this labyrinth of crevasses up to Camp II with Hunzas who were not always the soul of co-operation. We all realized how vital was Albert Bitterling's contribution to the common effort and there is no doubt that much of the credit for our ultimate victory must go to him. He stayed in Camp I for the whole of June and was able only once to pay a brief visit to Camp IV. His work of supervision of transports through the Rakhiot Ice-fall began on 3rd June and he made the following notes about it:

"At 3 a.m. Walter got up and prepared breakfast for the Hunzas and for me. This took a good hour, during which time I was able to lie in. To-day was Walter's rest day. I had taken a good rest, for after all we were, here in Camp I, almost as high as the Matterhorn. I had still not got used to going to bed early, so that I mostly woke up at midnight and would then lie awake for a long time. The previous night, therefore, I had taken a sleeping tablet to help things along. But at about 2 a.m an avalanche had come down from the Ganalo Ridge. The blast set the tents flapping and carried eddies of fine snow dust along with it.

"The morning was pleasant but no doubt things would be looking different by midday. I left Camp I at 5 a.m. with eight Hunzas, traversed the lower part of the ice-fall and emerged unscathed from over the wide plateau which lies in the path of the avalanches which thunder down the mighty precipices of Nanga Parbat's north-east face. Then the trail, already almost obliterated, twisted up the 3,000 feet high ice-fall. This ice-fall is the south-western arm of the great Rakhiot Ice-fall, which, wedged in by the north-eastern spur, comes down against the Great Moraine which, in turn, deflects its course towards the north-east. Still deeply covered in snow, it may be compared with the entrance to the Western Cwm on Mount Everest, though I imagine it is not nearly so steep nor so tortured. Nevertheless this obstacle presented us with a task both strenuous and dangerous before we could gain the extended glacier plateau to the north-east of Rakhiot Peak on which Camp III was to be established.

"Slowly we gained height. The Lambadar, leader of our whole team of porters, turned out to be an infernal drag. He was utterly unsuited to work above Base Camp. His way of climbing and his bearing generally had a demoralizing effect on all the other porters. He was the only man to moan about the heaviness of his load, about the heat, about the steepness of the climb. He would keep moving for only ten minutes at a time, and then compel the whole party to stop and rest for ten to fifteen minutes, during which time he would eat snow or chew tobacco and talk incessantly. For a time I just looked on and said nothing. I had already noticed that some of the porters resented him, but the position of the Lambadar among his compatriots was such that they dare not speak up against him; they had in fact to submit to him in spite of his inefficiency and idleness. Eventually I got one man who spoke a little English to ask him whether he intended to sleep in the snow that night instead of in his tent, for that would be the inevitable outcome of his everlasting pauses. His response was a face of such asinine stupidity that I had to turn away. I wondered whether I should detach him from the rope and simply let him wait there until our return. But I realized that nothing would suit the scoundrel better, and so I pushed on and slowly we sat our way up the ice-fall, skirted the crevasses, crossed the snow bridges like a trapeze act, and at 10 a.m. reached the entrance to the long open ramp which we called the *Wintergasse*. The weather was markedly deteriorating. I tried to urge them on but failed to impart any sense of urgency to the Lambadar. He had absolutely no idea of the dangers that threatened us out here in the open. Nor did he in the least mind making himself comfortable and settling down for a good rest on top of a thinly covered crevasse.

"Doggedly, angrily, I pushed ahead. The porters could see I was on edge and Hidaya Khan nodded surreptitiously but eloquently in the direction of the Lambadar who continued to rattle on even while he was on the move. The *Gasse* or ramp was getting steeper and narrower, it was snowing and visibility was bad. Another 100 feet and we should be at the declivity which was about twenty minutes climb from Camp II. I was climbing up the *couloir* vertically and could see the old trail above me. It was getting more and more steep and I was feeling less and less happy about it, for the slope was covered eighteen inches deep in new snow and I did not at all like the look of it. I decided to strike out leftwards in the direction of two enormous ice blocks and either gain the declivity from above by going round in a loop between them, or to belay at the foot of the upper ice-block and, thus secured, to traverse back into the *couloir* and stamp out a safe trail in the loose snow. I was just taking my first steps to the left when Hermann Buhl appeared in the dip. He was on his way down to Base Camp to be examined by Karl and he called out that he would stamp out a trail for us through the *couloir*. He came down to me and we exchanged a few words about what he was going to do and the treacherous state of the snow. Then suddenly there was a muffled crack—the surface of the slope had broken away and was sliding down. The movement threw the porters roped below me off their balance and down we all went!

"For a few yards I was able to keep my feet and travelled upright until the pull of the rope dragged me down. Our involuntary descent was arrested for a moment and I was just about to get on my feet when a further tug on the rope sent me on my face again. At length our fall came to a halt—not far from the edge of a steep overhang. Fortunately, owing to the narrowness of the *couloir*, only comparatively little snow had been set in motion and I was able to ascertain, much to my relief, that we had all stayed on the surface. The porters were badly shaken, but I assumed an unruffled calm and Hermann, who had come down with us, but standing, carried on as if nothing out of the way had happened. This appeared to make the right impression and I told the men to deposit their loads to the side below the two ice-blocks. The porters were naturally in a state of shock after the incident and the backs of some of them had been bruised by the sharp corners of the crates they were carrying. One could not expect them to go on, but they behaved in exemplary fashion. Once the first shock had worn off they carried their loads in an orderly manner to the place I had indicated; only the lordly Lambadar asked that Hermann should take his for him. While the men were recovering their breath I stacked up the loads into a tidy pile.

"It was shortly after 12.30 when the snow-slide had occurred.

That meant that we had taken seven and a half hours to get here! Walter told me in the evening that the group of porters under Isa Khan had covered the route to Camp II in four and a half hours. Such were the tempo and tactics of our Lambadar! At 1 p.m. we started our slow descent, Hermann going ahead. Alim Shah seemed to have suffered most from the spill but he kept up with us bravely. Only that crock of a Lambadar, who had sprained his right wrist, whimpered and gabbled to himself without respite until I told him point blank to keep his mouth shut. We had unroped and it·was not until we reached the ice-fall near Camp I that I took them all on the line again. It then came to light that the Lambadar had lost his sling and carabiner. Without a word and quite on his own initiative Kara Beg took his carrying rope and secured the venerable elder. On we went in heavy driving snow. Then, another halt. The Lambadar must adjust his clothing. My patience was now at an end and I let fly at him in a torrent of English and broad Bavarian to the obvious delight of the onlookers. This outburst remained effective for the rest of the descent. We arrived at Camp I shortly before 4 p.m. Walter was there to greet us with a refreshing drink and later there was some substantial soup for me. The Hunzas flopped into their tents. At 5 p.m. Peter telephoned to say that Walter and the Hunzas must return to Base Camp that day. One hour later the last Hunza had gone and I was alone. I crept into my tent with a thermos-flask of hot Milo, took half a tablet of Phanodorm and sank into blissful slumber. I had that day crossed the 17,000 feet line for the first time.

"The next day (4th June) I was awakened by some hearty yodelling. Hans Ertl was there, on the look-out for avalanches from the north-east face as subjects for his movie-camera. Kuno Rainer and Otto Kempter were up in Camp II. At 9 a.m. we signalled to them that they should stay up there. Later on we could see them working on the trail to Camp III. The day was fair and warm. The Isa Khan group turned up at 10.30 a.m. with the large tent which was to go up here at Camp I for the porters. Herrligkoffer also looked in for a short time. Some mail had arrived at Base Camp on the previous day but, alas, there had been nothing in it for me. At 12 o'clock I got into radio communication with Base Camp to make a few requests. At around 2 p.m. the weather changed completely in the space of five minutes. Fog spread from the north totally enveloping the still sun-drenched landscape and in a moment snow was falling. The Hunzas lay in their tents while Albert Sahib (*i.e., the writer, Bitterling himself*) had the honour of preparing their afternoon tea on the Primus stove and looking after their well-being generally. Walter Frauenberger appeared just before dusk, and during the evening I was fortunate enough to get through once again to Base Camp by radio telephone. The porters had, as it happened, reported to me that they had no chapatis for the next day and I had been on the point of sending them back to Base Camp for that reason. But I now received strict orders to keep the porters up there and after some persuasion they made do with crispbread and fish. Then Walter and I remained for quite a while at the Primus in the driving snow, preparing thermos-flasks of tea for the following day." (Thus far Albert Bitterling.)

On Friday, 5th June, Fritz Aumann with the help of six Hunzas pitched the third large communal tent at Camp I. It gave shelter to all the porters and inside it they could comfortably cook, work and dry their clothing. At the same time there was plenty of room for twelve of them to lie down. Since the Base Camp had become really established the area in front of my own tent had been so beautifully laid out under the orders of Rhabar Hassan that it almost resembled a Kashmir summer-residence. Steps formed an approach, two rocks were arranged as a portico, and flowers were trained about the rock table at which I worked.

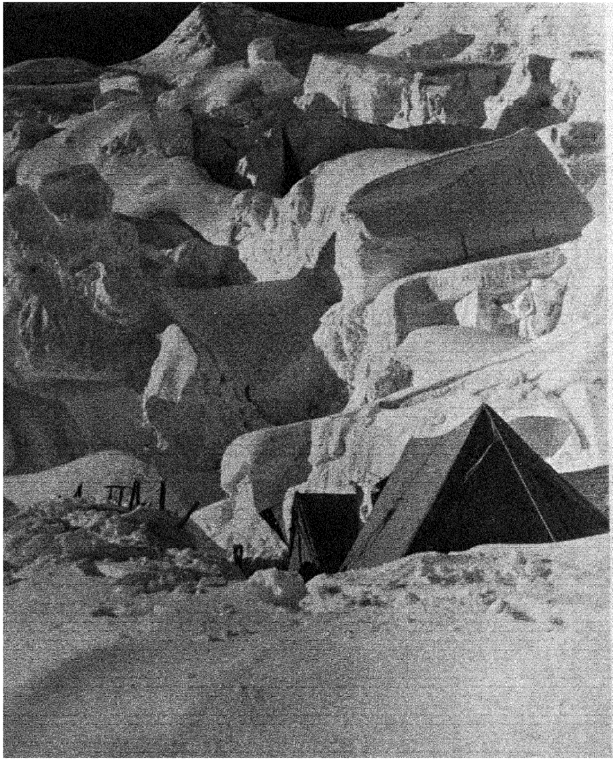
I was seated here at my typewriter when I saw Fritz Aumann, his task at Camp I completed, coming down. He slid down the moraine slope on the seat of his trousers, and there he was, back in Base Camp. Hans Ertl had seen him coming from his look-out point and with his customary alert helpfulness, had immediately set about preparing an invigorating drink.

At 7 a.m. I carried out my medical round in the porters' tent and treated a dislocated knee-joint, a torn ligament and a heel injury. The Lambadar had a sprained wrist as Albert had reported. During the morning, the two Hermanns (Buhl and Köllensperger) after their few days rest in Base Camp, made their way up to the high camps once more. They were, in the course of the afternoon, to seek a new route through the small ice-fall before Camp I.

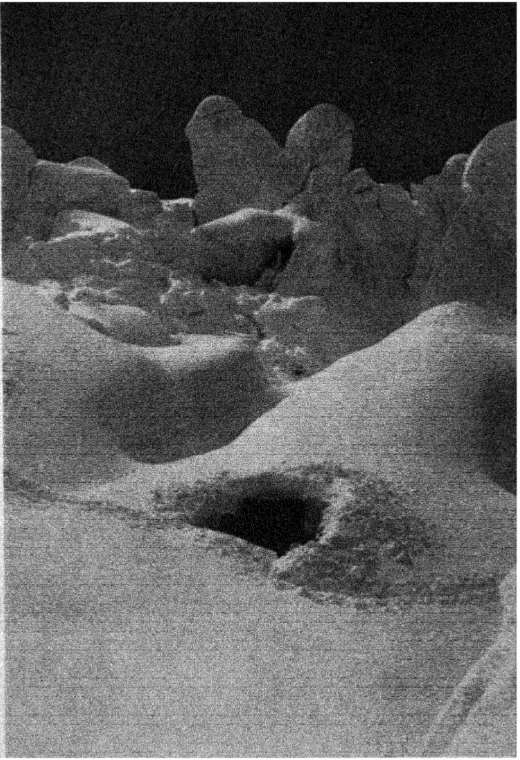
On the morning of Saturday, 6th June, the sky was slightly overcast and the temperature had risen above freezing point. Peter was away early with his gun and came back with a partridge. At 7 a.m. Hans Ertl went up to Camp I with Rhabar Hassan who was to give the Hunzas another pep talk and exhort them to give of their best. He was at the same time to take his leave of his men who were to celebrate the most important festival in the Moslem calendar, 14th June, the end of the fast of Ramazan, in Camp III; Rhabar Hassan himself would remain in Base Camp from now on. I had for this great occasion ordered several goats from Tato for the Hunzas. They were to be slaughtered down below on the Monday and the ready-cooked joints would then be carried up to the high camps.

Peter, Fritz and I had a pleasant, easy day. Peter turned barber and gave Fritz a hair-cut, while I spent the whole morning sitting on my mattress beneath the sun-canopy in front of my tent and writing, writing, writing. . . .

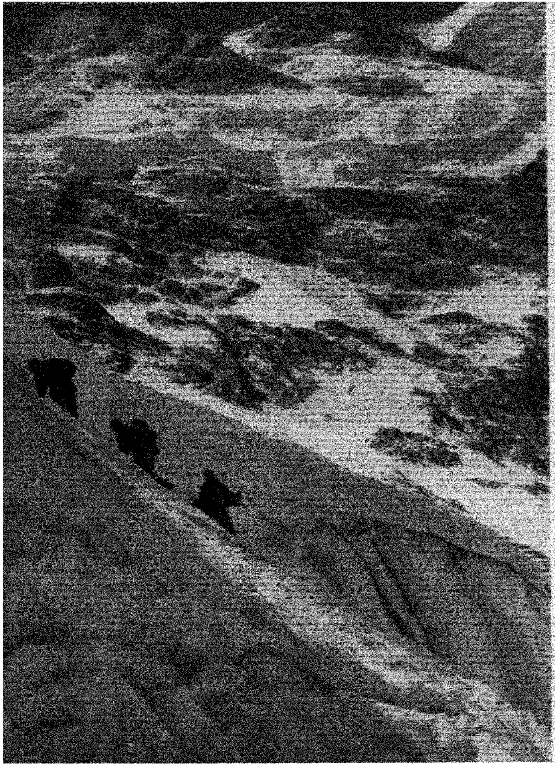
Buhl and Köllensperger had taken six heavily laden porters through the Great Ice-fall to Camp II, and Kollensperger was staying on in the camp to await the return of Rainer and Kempter who were laying the trail to the future Camp III already above the 20,000 feet line. The site of our Camp III corresponded to Camp IV of previous expeditions; we were obliged to cut out the intermediate camp, formerly Camp III, owing to our acute shortage of porters. Buhl went back the same day on his own and, the next morning, took another batch of twelve porters up to Camp II. He was back by 11 a.m. He appeared to have got over the altitude sickness which had kept him so long in Base Camp under my supervision. But sore throats and coughs were to trouble him throughout his time on the mountain without, however, affecting his drive. Frauenberger, Kempter and Köllensperger had (on 5th June) settled themselves in at Camp II and were now establishing the route



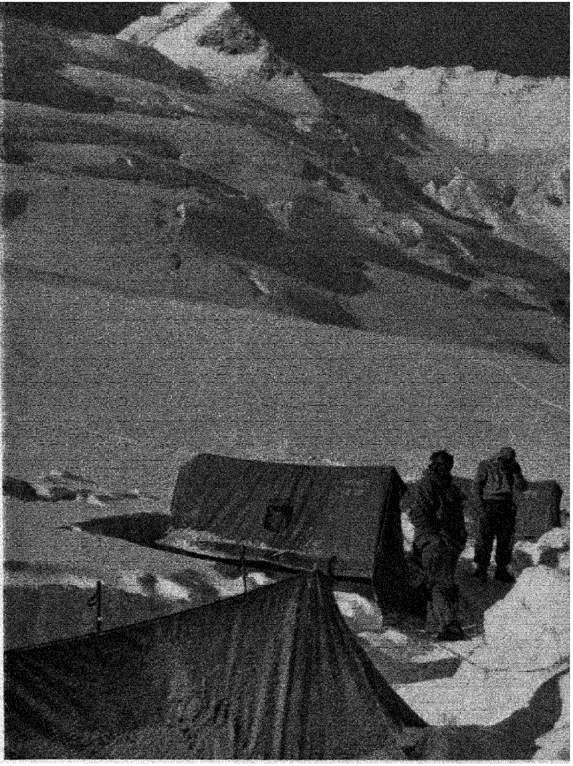
Camp II in the Ice-fall of the upper Rakhiot Glacier



Porters' tents in Camp II



Ascent to Camp III



Camp III with the Rakhiot Peak in the background to Camp III. On 9th June Bitterling and Buhl took twelve porters through the Great Ice-fall. But in spite of these efforts and the continuing good weather, no tent had gone up above the 20,000 feet line where Camp III was to stand.

It was my view that we were progressing too slowly and it depressed me that hours and even days often went by with little or nothing to show for them. I discussed the whole situation urgently with the spearhead group and was once more given to understand by my comrades that the root of the trouble was the shortage of porters. With this in mind I had already got twenty Tato men carrying loads and they would remain on the job until all stocks destined for the high camps were piled up in Camp I. But now we wanted to accelerate the transport over the Great Ice-fall to Camp II and then further up to Camp III which at 20,180 feet was to be the assault base. As a result of these deliberations I sent Rhabar Hassan off to Gilgit to recruit a further twelve Hunza porters. As things turned out only four of these proved suitable for service in the higher camps and even they were lacking in enthusiasm and were not fully effective, possibly because they had not had time to become fully acclimatized.

It was only after Camp III was established that we finally heard what had happened to our sorely lamented Sherpas. "Tiger" Pasang Dawa Lama had duly set off from Darjeeling with his men but they had all been held up at the Pakistani-Kashmir frontier. They had waited there literally for weeks pending some relaxation of the entry bar. Eventually they had been turned back and had had to return home. This was a crippling blow indeed.

On Wednesday, 10th June, Rudolf Rott, the Nanga Parbat enthusiast from Augsburg, suddenly turned up in Base Camp. He was, in spite of his long journey, still looking immaculate and had with him tent, ice-axe and a rucksack weighing 60 pounds. Why he should have thought it worth while to drag his ice-axe all that way was not quite clear. He had hitch-hiked from Karachi to Rawalpindi, but he had not been able to get an entry visa for the Chilas region. Off his own bat, he had set out to travel the length of the Kaghan valley and to cross the Babusar

Pass on foot and by jeep. Rott had behind him a similarly adventurous hitch-hiking journey from Germany and with his arrival at the Base Camp of the expedition he had achieved his object. He now wished to stay with us for two weeks. It remained for me somehow to fit him into Base Camp life, and although some of the team were against this on principle, it seemed to me on sober reflection and in the light of the man's quite outstanding achievement, that we could not simply let him pitch his tent nearby and then proceed to ignore him. I therefore gave him the chance to make himself useful against his share of food and other amenities. One had to admit that a man who had crossed the Babusar Pass and made his way up here with 60 pounds on his back had, to say the least, given testimony of remarkable toughness and we decided, in recognition of this feat of endurance, to offer him our hospitality for the rest of our time in camp. Afterwards, in any case, he wished to return home over the mountains by the land route. He hoped to be in Augsburg again by the end of August.

But the Political Agent from Chilas brought Rott's plans to naught and my application for an entry permit dated retrospectively was of no avail as it was held up in the post and did not reach Gilgit in time. However, during the time that Rudi Rott was able to stay with us he proved himself to be entirely unassuming and a thoroughly decent chap. He deputized as Base Camp Commandant while Fritz Aumann went up to give some urgently needed help in trail-making and in shepherding the porters between Camps I and III, and he carried out his duties in an utterly satisfactory manner.

The next day, Thursday, 11th June, Peter Aschenbrenner was up and out of his tent at the crack of dawn. He had had a wakeful night, and after pondering the situation from every angle the following plan of action had taken shape in his mind: he thought that we should make the fullest use of the prevailing good weather, and that our spearhead group (Buhl, Kempter, Köllensperger, Rainer) with a few good porters should at once set up the higher camps. The advance to the East Arête should be forced, conserving the time and energy which otherwise would have to be spent on specially preparing the Rakhiot

Ice-wall with fixed ropes. On this basis the whole thing could be accomplished in eight days.

Peter forthwith sounded the alarm and Kuno Rainer and Otto Kempter, who were staying in Base Camp at the time, were dragged from their beds before they realized what was happening. They were told to pack up and be off for the high camps before noon. The consolidation of Camps II to V would be left to the older members of the expedition, who would also be responsible for bringing up supplies. Peter Aschenbrenner was definitely against taking the route over the *Mulde* or amphitheatre below the Rakhiot Peak in order to reach the East Arête—as Walter Frauenberger had suggested. Peter had in 1932 approached the East Arête through this *Firn* basin and the lurking danger of avalanches there had created an atmosphere of anxiety and malaise which he well remembered. From Camp V (on the East Arête) the assault on the summit would follow Erwin Schneider's plan. This had taken shape in the course of several discussions in Innsbruck when Schneider, veteran of Nanga Parbat, had expounded the idea that the last camp should this time be placed in the deepest declivity of the East Arête. From that point those two or three climbers who were in the best form could set up an intermediate base (tent or ice-cave) in the neighbourhood of the Fore-Summit and could then, without porters, press on to the summit.

On Thursday, 11th June, the day when Peter Aschenbrenner put his plan into action at Base Camp, Walter Frauenberger and Hermann Buhl reached the upper terrace of the Rakhiot glacier. They at once pitched their tents at an altitude of 20,340 feet and so laid the foundation of Camp III, near the scene of the avalanche disaster which overtook the 1937 expedition at the then Camp IV. From there they paid a visit to the South Chongra Peak, 21,155 feet. Walter was obviously full of enthusiasm when he wrote of this experience:

"From the summit of the South Chongra Peak which I had reached from Camp III in two and a half hours in splendid weather, I glimpsed the main summit for the first time high above the East Arête. Its snowy crest shone forth like a divine promise, and with humility and reverence I greeted our own

Nanga Parbat. That so many of the best German and Austrian climbers and their faithful Sherpas were now held fast beneath her mantle of ice seemed no longer a matter for resentment, for that radiant crown, reaching heavenwards in transcendant beauty, rightly commanded the supreme sacrifice. Were we to be allowed to penetrate those icy fastnesses and for once to set foot upon that other-worldly pinnacle?

"I took my field-glasses and scanned the north-east flank of Rakhiot Peak, which was now directly facing me, for our route to the next camp, impressing every detail of the ascent firmly in my memory.

"The next morning I was there, on the trail upwards. It was such splendid weather that we put a message through to the lower camps, which were at this moment being systematically consolidated, that they should send a few porters up to us to accelerate the work of setting up the high camps and that the other members of our young assault group should in any case join us at once. If the good weather held we might succeed in storming the summit. Trail-making over the steep north-western glacier slopes between Camps I and III, which were deep in loose powdery snow and terraced by ice-falls, was admittedly a strenuous business at this early season, but we imagined that further up the ridges would have been swept comparatively clear by the high winds. Our last swing upwards took us too much in the direction of Rakhiot Peak and as a result we were confronted with a steep pitch rising above a broad *Bergschrund* which called for some meticulous ice-technique—no light undertaking up here at 22,000 feet with our heavily labouring lungs. After several hours' climbing from Camp III we were standing in the shallow depression beneath the north-east ice-wall of Rakhiot Peak on the site earmarked for Camp IV. We were greeted by a gale from the south and instead of getting our hoped-for view deep down into the Rupal valley we saw only clouds welling up over the ridge obscuring also the northern prospect which till then had been quite clear. We did not stay long and were soon on our way back again. It took us two hours to reach Camp III and we just managed to creep into our tents before the storm broke.

"This storm was to rage for four days and nights, sweeping the high plateau on the Rakhiot glacier. Our two tents were almost buried in snow. All dreams of quick conquest were shattered in the first night. There was indeed no time for dreaming for we were forced out from our shelter into the whipping gale at least every two hours, day and night, to free our tents from the mass of snow bearing down on them. We should otherwise have risked being crushed by the enormous weight which accumulated. One of the tent poles snapped. We repaired it in a rough and ready fashion with a ski-stick but the other props became more and more bent under the combined pressure of snow and wind. Again we used ski-sticks as stays, binding them to the poles with our puttees.

"And so the snow continued to pile higher and higher in the little dip where we had dug ourselves in and our tents sank deeper and deeper into the cold white waste which cut us off from the lower camps. It was inevitable in the circumstances that our thoughts should turn to our comrades of 1934 lying buried on the ridge between Rakhiot Peak and Silver Crag. For all their iron determination they had been no match for the mighty blizzards which had raged unabated for days on end bringing them slow but certain death. It was natural, too, that we should think of our other comrades who, close to our present encampment, had been cruelly overwhelmed by an ice avalanche during the night of the 13th-14th June, 1937, and were lying under the same cover of fresh snow which was threatening to engulf us.

"At length the storm abated; the sun came through and with it life once more gained the ascendancy, putting an end to our preoccupation with death. Hermann Buhl and I were still busy digging out our tents when Aschenbrenner, Rainer, Kempter and Köllensperger arrived on the scene with six porters after a strenuous ascent through the deep snow."

During the night of 12th June the snow which kept Frauenberger and Buhl imprisoned in Camp III piled up to a depth of twenty inches. The whole of the following day heavy snow-clouds which had come up from the Indus valley were billowing against the northern face of the mountain. In between the falls of snow the southern sun beat down mercilessly and created a hothouse atmosphere.

While avalanches were thundering down the North-East Flank and obliterating the ascent routes with showers of ice, we down in Camp I were occupied in going over and improving the trail which zig-zagged through the heavily fissured Great Ice-fall. At one point the passage was no longer safe and we had to look round for a new way of getting through. But no more practicable way could be found than that reconnoitred at the outset by Rainer and Buhl and so we had to put the original pitch, disagreeable as it was, into commission again, and make it passable for the porters by means of a rope-ladder fixed round a *sérac.*

The rest of the spearhead group, now headed by Aschenbrenner, was marooned in Camp II above the ice-fall vainly striving to open up the trails. Aschenbrenner describes their isolation during these days:

"June the 13th was a bad day. Rainer, Kempter, Köllensperger and I were held up at Camp II and straining at the leash to get on up to Camp III. During the night our tents had been flattened by the weight of the snow. Fortunately it was a little brighter in the morning and we were encouraged to see Buhl and Frauenberger at work up near the gap before the Rakhiot Ice-wall. But visibility lasted only a few minutes, then it snowed again. We set off for Camp III, but were obliged to give up after only 100 yards. The snow was too loose and too deep and the old trail had been completely obliterated.

"Hans Ertl who had spent the night with us in Camp II now tried to track down through the ice-fall towards Camp I with Kuno Rainer, to open up the trail so that someone could come up from below and bring the badly needed supplies for our porters who were threatening to eat us out of house and home. But they were soon back with the verdict that the ice-fall was absolutely impassable. This was a serious state of affairs.

"We all felt horribly depressed. It snowed continuously. Again and again we were obliged to creep back into our tents. At 6.30 p.m. we observed that the barometer was rising. The temperature was 1 °C. below freezing point; a bad sign.

"The next day was Sunday, 14th June, the anniversary of the avalanche disaster of 1937. At 10 a.m. we were still lying in our sleeping-bags. We were well and truly snowed up. Kuno Rainer was the first to venture into the open and start digging us out, later assisted by the porters. Ertl prepared porridge and fried some salami, and the warm food was heartening. We thought dreamily of good weather, Munich *Bretzel*, new bread and fresh porters. All the men of the plucky Isa Khan group were badly spent as a result of their sustained effort in keeping the loads moving between Base Camp and Camps I, II and III and had to be sent down to Base Camp for a few days rest. But even when they were restored, the outlook would still not be too bright. Out of the twenty-two Hunzas we had engaged, only twelve had proved to be willing and adaptable. They were loyal, hefty and very game, but—unlike the Sherpas—they could not be left to cope with the ice-fall alone. One of us had always to go with them. They were, among other things, quite capable of taking a rest on the most precarious snow bridges spanning yawning crevasses. So far the best of them were Isa Khan, Madi, Degin Sha and Hadje Beg.

"It was painful to have to spend these precious days just lying about. Bitterling was resting in Camp I, Fritz Aumann and Rott were down in Base Camp. Buhl and Frauenberger were obviously marooned in Camp III. Here in Camp II we were Rainer, Ertl, Kempter, Köllensperger and I and six porters. Up to three days ago the trail had been open right up to the site of Camp IV. If the weather improved now, we should need another three to four days to put it back into commission again. For the moment we were condemned to inactivity.

"At 4 p.m. it looked a little brighter and everyone set to, to dig the tents out once more. We were all feeling restless and short-tempered, suffering as we were from lack of air caused by the pressure of the snow on the tent sides. The thunder of avalanches roared incessantly in our ears, which did little to improve matters.

"At 5.15 p.m. a blue sky suddenly opened up above us and everyone emerged from the tents to take photographs, but at 6.40 p.m. it was snowing again. Four feet of new snow!

We began to wonder when we should get away from this spot.

"The night was damnably cold—14°C. below freezing point. The tents—we observed with pleasure this augury of good weather—were thickly covered with hoar frost. But on the morning of 15th June visibility was nil, although the snow had eased up somewhat. Köllensperger, Kempter and Rainer lost no time in setting off to track up towards Camp III. They sank into the snow up to their chests—a gruesome spectacle. After a while Kempter turned back complaining of severe pains in his stomach.

"Köllensperger and Rainer continued undaunted and indeed got through the whole of the upper part of the second ice-fall until they were in the neighbourhood of the old Camp III. They were disappointed they were not met, as they might have hoped in such desperate snow conditions, by Buhl and Frauenberger tracking down in the opposite direction, and they had to turn back. We learned the following day why Buhl and Frauenberger had not been able to come down: a terrible gale had been blowing which had threatened to tear their tents from their moorings. They had thought it completely out of the question that anybody would attempt to come up from Camp II.

"Ertl and I tried to track down towards Camp I. We could see from where we were that a trail led up from below, but thought it impossible that anybody could get through in the deep snow. So we returned to Camp II at 12.30 p.m. Three porters were dispatched to meet and support Rainer and Köllensperger, and all were back by 1 p.m. They had not been able to get through.

"But we got a terrific surprise after all. Towards evening Albert Bitterling and Fritz Aumann suddenly appeared in Camp II. They had been struggling for ten hours in snow up to their armpits and they were all in, but they responded comparatively quickly to our ministrations. Tough, determined chaps that they were, they had carried up the badly needed supplies for the porters. They brought a pathetic piece of news with them: Rott had been taken off to Gilgit with a police escort as he had crossed the Kashmir border without official permission. Dr. Herrligkoffer had done his best to intervene, but without avail. They had also picked up a silly rumour from a local broadcasting station to the effect that the Everest expedition had failed and that Tensing had struck out on his own!

"At 5 p.m. Bitterling and Aumann were due to return to Camp I. We gave them a send-off worthy of Olympic champions and yodelled after them as they started on their way down. We learned on the following day that an avalanche had taken them by surprise and had showered them inches deep in ice-dust, but they had emerged unscathed. They arrived back at Camp I late in the evening, famished and totally exhausted."

16th June was a glorious day. Trail-making parties went up the ice-fall from Camp I, and from Camp II to Camp III where Buhl and Frauenberger were still completely cut off. By 4 a.m. Camp I was well astir. Loads for eleven porters had been prepared overnight, but in the half-light of dawn it was found that some of the Hunzas were missing. The story was that they had been taken ill during the night and were confined to their tents. These "illnesses" were seldom to be taken seriously—they were more usually an excuse for taking an extra rest day—and at 5 a.m., after some straight talking, the full complement of porters was at length ready to march off. A climb of five hours took them to the day's objective, Camp II.

I had hurried ahead of the convoy and was warmly received by Ertl. When, a few hours later, the porters were seen approaching, ascending the last rope-ladder and crossing the last crevasse, Ertl put his movie camera into action. The column winding its laborious way among the towering *séracs* of this gigantic ice-fall was certainly something for the record.

Just before sunset the scene around Camp II with its enormous cornices of ice and snow offered a magnificent sight. On the few evenings I was to stay there the shadows would lengthen across the glacier and our comrades further up in Camp III would take to their tents to escape the rapid onset of the cold; yet the majestic pinnacles encircling the Rakhiot valley would still be sparkling in golden sunlight: Buldar Peak, the 20,000 feet peaks of the Chongra group and towards the south Rakhiot Peak from which the long *Firn* ridge of the East Arête led up to the South-East Summit, 24,600 feet, the southern horn of the Silver Saddle. The night would fall with startling suddenness and soon the temperature would have fallen to 15-20° C. below zero.

It was usual, given normal climbing conditions, for everyone to have returned to camp by afternoon and then would begin an endless round of cooking, eating and writing. Towards evening loads would be prepared for the following day. Then, when we had just settled snugly into our down sleeping-bags the porters would begin having afterthoughts. The sound of their whining voices as they stood in the darkness outside our tents in the high camps is unforgettable.

"Sah'b"—a long pause—"Sah'b."

"Yes, what is it?" one of us would mumble testily from his half-sleep.

"Sah'b, cigarettes."

"Why the devil couldn't you have thought of them before?"

This, shouted out in broadest Bavarian and promptly understood, would disarm the plaintiff and encourage him to reserve his request until the following morning. But just as one had got comfortably settled again there would be more hoarse whispering outside the tent:

"Sah'b, sugar" or "Sah'b, tea" and so it would go on and on for half an hour or so until one could bear it no longer and would get up and give them what they wanted. We had tried for weeks to get them to put in for their supplies earlier in the day but all our admonishments had fallen on stony ground. As soon as we had taken to our tents the porters would start remembering what they wanted and the monotonous chant "Sah'b, cigarettes" which droned outside our tents at nightfall was still drumming in our ears even on the voyage home.

On 16th June, when I had accompanied the convoy through the Great Ice-fall, I had met only Ertl in Camp II. The others, Aschenbrenner, Rainer, Kollensperger and Kempter, had already set off early to stamp a trail to Camp III where Buhl and Frauenberger were still cut off after the previous day's vain attempt, when Rainer and Köllensperger had had to turn back in deep snow after almost managing to get through.

Aschenbrenner, in charge of the party, describes the ascent:

"At 3.50 a.m. we got moving. The temperature was 14° C. below zero but it was a clear, starry night. Ertl was to stay behind in Camp II as liaison while I went up with Rainer, Kempter and Köllensperger and five porters. The track-making of the previous day had been well worth the effort, but we had to contend with virgin snow from the site of the former Camp III onwards, which was where Rainer and Köllensperger had got through to on the previous day.

"The weather was good, but a terrible gale was blowing which increased in ferocity as we gained height. We thought it strange that no one was coming down to open up the trail from above, but when we had got to within 60 yards of Camp III, Frauenberger appeared. He seemed quite dumbfounded to see us. He and Buhl were busy digging out their tents which had been completely submerged. It was highly unpleasant out in the open and in no time our beards were encrusted with ice. One could hardly stand upright in the wind. Great banners of snow were flying from the crests of Rakhiot Peak and the North-East Summit. Obviously a pretty good gale was blowing up there.

"As, crouching in the wind, I reached Camp III and flopped down in the tent, memories suddenly came crowding in. In 1932, when we first reconnoitred the route up here, it was all quite unknown territory to us. In 1934 we christened the 'Moor's Head' and the 'Silver Saddle'. What happiness to be here again, even if this third trip to Nanga Parbat had provoked the first serious argument in twenty years of married life. Yes, so we had lain in our tents during those disastrous days of 1934, in the raging blizzard, powerless to reach Merkl on the East Arête and to ward off the inevitable end.

"When we got into our sleeping-bags Kuno Rainer and I discovered that our feet were freezing. We took it in turns to massage each others' but did not succeed in bringing about any improvement. The temperature was 14° C. below zero and the gale was still blowing with full force. We settled down at 11 p.m. but Rainer slipped out later on to dig the tents out once more.

It promised to be a bad night up here above 20,000 feet and we felt as if we should suffocate. We were all, in fact, suffering from varying degrees of claustrophobia.

"When morning ushered in our twenty-second day on the mountain we were completely snowed in again. Everyone complained of shortness of breath, but not one of us wanted to venture outside in the storm. The kitchen tent could simply not be seen and had to be dug out. One or two had developed hacking coughs and we others nursed them like small children, rubbing their chests with hot melted lard. It was clear that the youngsters had overtaxed their strength, although Frauenberger and Bitterling had done everything to spare them so that they would be in good form for the assault on the summit.

"Frauenberger and Buhl, thinking probably of 1937 (when the whole camp with seven climbers and nine Sherpas had been buried by an ice avalanche) had placed Camp III too high. We now moved it 150 feet lower, to the 1934 site. In this position the tents were just as well protected from avalanches but were less exposed to the wind.

"At 8.50 a.m. we spied some climbers coming up and I set off to meet them. It was Ertl and Köllensperger with seven porters. We learned that Dr. Herrligkoffer and Fritz Aumann had yesterday fought their way up the big ice-fall to Camp II. This was important news because of our dwindling store of porters' provisions.

"On this same day Rainer, Buhl, Kempter and Frauenberger climbed up to the gap near Rakhiot Peak (22,000 feet) roughly at the point where Camp V had stood on earlier expeditions, to dig an ice cave in preparation for the establishment of Camp IV. We had learned from experience that a climber, after a strenuous ascent, was often incapable of putting up a tent, and it was important for him to have at least a hole protected from the wind. The four of them looked thoroughly jaded on their return. Buhl complained of a severe sore throat and was coughing wretchedly. Kuno Rainer has frost-bites on his feet, but would not admit it. Nevertheless both men went up to the ice cave again the next day (the 18th) with Frauenberger and Kempter.

"By 3.40 p.m. on the 17th the wind had dropped and it was a beautiful day. We could hardly believe it. If the weather could only stay like this for a week the youngsters could go to it and make their attempt on the summit." (So far Aschenbrenner.)

On 18th June the weather once more threatened to change. To the east the sun rose above the Chongra group, veiled in dense fiery-red haze. At 4.30 a.m. Ertl, Aumann and Köllensperger were leading the way up to Camp III followed by twelve porters heavily laden with food supplies. Somewhat later Frauenberger, Rainer, Buhl and Kempter were seen to set out from Camp III for the ice cave. The morning was so warm and so free of wind that it was quite possible to cook out in the open. Petrol stoves were humming away in all the camps as snow was melted and hot drinks were prepared to greet any new arrivals.

Aschenbrenner continues:

"By 18th June the ice cave at Camp IV was ready. Ertl and Aumann had come up to Camp III with twelve porters and had at once erected new tents. Camp III was beginning to look like a small village.

"Fritz Aumann, full of activity as usual, took six porters down to Camp II where Dr. Herrligkoffer was staying, while I selected the six porters who were on the following day (19th June) to go up to Camp IV. Buhl, Köllensperger and Kempter were then to stay up in the ice cave. They were now in good form in spite of their labours—that was obvious from the way they came down at full gallop but Kuno Rainer was very far from well. He was a difficult patient because he would never admit to being off colour and always maintained that he would be all right 'to-morrow'.

"Ertl arrived in Camp III with a most impressive item of news. The British climbers had conquered Everest. At first we were speechless, and then as the news sank in we all experienced a wonderful feeling of being driven on by a new impetus. Now Nanga Parbat must be ours, and, if possible, without the use of oxygen. The news kept us talking for hours.

"Kuno Rainer became delirious during the night, and I could not help thinking of Drexel's death from pneumonia in 1934.

Luckily I was able to give him a shot of aureomycin as Herrligkoffer had recommended in such cases and towards morning his condition became easier although he was still feverish. This camp at an altitude of 20,000 feet was no place for a man in his state.

"The night was the coldest so far with a temperature of 22° C. below freezing point. Everything was covered in thick hoar frost. The porters were wailing like children; some of them had only their thin sleeping-bags with them, having left the down bags at Camp II. The sun rose at 6.30 and how glad we were to see it."

On the morning of that day, 19th June, I set out from Camp II for Camp III with friend Aumann and five heavily laden Hunzas. Before starting off I had had to have a good talk with two of the porters to convince them of the purely imaginary nature of their supposed indispositions. They were, as usual, making the most of any little ailment to secure an extra day's rest.

While we were arriving at Camp III and being warmly received by Peter Aschenbrenner and Walter Frauenberger, the assault group, this time without Rainer, and consisting of Buhl, Köllensperger and Kempter with four Hunzas of the Madi group, were once again traversing upwards towards Camp IV.

I found Kuno Rainer much better; but it was difficult for him to accept the fact that he was badly in need of rest, and he insisted on taking part in the common effort again as soon as possible.

Köllensperger was back again in Camp III with the porters at around 2 p.m. Buhl and Kempter remained above in Camp IV in order to prepare the formidable route on the Rakhiot Ice-wall for the following day. Kempter writes:

"In the afternoon we erected a storm-tent, digging it more than halfway into the slope. In the evening it was icy cold inside our cave, a crack in which was admitting a shocking draught, but at least we were well protected from the high wind and driving snow which had started up in the course of the afternoon."

All through the night to 20th June there had been 25° C. of frost in Camp III and even inside the tent the thermometer was registering 16° C. below zero. As we lay in our sleeping-bags our breath created crystals of ice which formed into a crust upon the coverings around our faces. But as usual, Hans Ertl was up and pottering around camp at dawn. He boiled water for tea and not only concocted a most wonderful breakfast cereal from milk, biscuits, sugar and cinnamon, but then proceeded to serve it to us personally in our respective tents. He was throughout a first-rate comrade on the mountain. Admittedly he was always clamouring for more porters to ferry about his heavy photographic apparatus and had some differences of opinion with Aschenbrenner about the priority of loads, but the acute shortage of porters made such arguments inevitable. To-day, for instance, out of eighteen porters only seven were fit for work. Twelve new Hunzas were expected to arrive in Camp II and it was to be hoped that we should not be disappointed.

For the first time, five porters came up to Camp III from Camp II without escort. Bitterling, still in Camp I, was begging to be relieved. He had been feeling horribly cut off ever since Aumann had gone up to the higher camps. For weeks he had been living either entirely alone or in the company only of porters, keeping up his invaluable shuttle service through the ice-fall and watching over the porters like a nursemaid. To-day he was to climb up to Camp II with ten of the new men and was due to continue up to Camp III on the following day. Walter Frauenberger had taken five porters up to the ice cave at Camp IV in the early morning and had been able to watch Buhl and Kempter crawling up the Rakhiot Ice-wall like flies. These two had not been able to restrain themselves and had had to bag their first 23,000 feet peak, namely Rakhiot Peak itself. From there they were able to see the main summit for the second time and Buhl scanned every detail of it until his eyes nearly started out of his head. Rakhiot Peak, 23,196 feet, represented the most formidable obstacle to be negotiated between Rakhiot glacier and the Silver Saddle, the avalanche-threatened 1932 route straight up the *Mulde* having been discarded as being altogether too dangerous and depressing.

Walter Frauenberger comments in his diary:

"The great rocky eminence of Rakhiot Peak has to be climbed across a steep 800 feet high ice-wall until at last one reaches a gap in its North Spur at an altitude of just on 23,000 feet. The summit structure has then to be circumvented by negotiating its almost equally steep and icy west flank to the corniced East Arête leading up to the South-East Summit of Nanga Parbat.

"In two days of strenuous hard work Buhl and Kempter prepared a safe route through the Rakhiot Ice-wall and part of the adjoining traverse by means of fixed ropes. They had to haul the rope across the ice-wall themselves as the Hunzas had refused to make the ascent of the Rakhiot face. As a reward for these exertions they treated themselves to an ascent of Rakhiot Peak itself, where Buhl was unable to resist climbing the extremely difficult needle which soars above the snow summit, all of which was indicative of the extreme buoyancy and keenness of our two-man assault team. A few yards below the Rakhiot Gap they found two carrying frames and some sleeping-bags bleached and beaten by sun and storm, relics of some earlier expedition."

In the afternoon Buhl and Kempter again descended the Rakhiot Ice-wall to Camp IV and completed the work of the morning. Kempter gives the following account:

"We secured the end of the rope to a protruding rock and went back with our hands on the rope, making knots and loops at intervals of fifteen feet. From the Gap, at an altitude of just on 23,000 feet, we had a magnificent view up to the main summit. Below us, at about 20,000 feet, lay a sea of cloud but we were being buffeted by a stiff wind. We were in Camp IV again by 2.30 p.m. We sealed up the crack in our ice cave but it did not seem any less cold. My worst bugbear was my feet which were almost perpetually frozen. The only relief I got was at night when I was inside my sleeping-bag. No one had come up from Camp III to-day. Buhl and I dreamt of the heat in Pakistan. Except for Buhl's altitude cough we were quite fit and not suffering from any signs of altitude debility."

In the course of the afternoon of the 20th, thanks to the

Evening in Camp III

carelessness of one of the porters, the kitchen tent in Camp III went up in flames. This was, of course, quite a serious loss, but the mishap had its bright side, for Peter Aschenbrenner now decided to have a proper kitchen dug into the ice in which one could not only cook but also sit down comfortably.

Suddenly at midday we heard the sound of an aircraft approaching, and a swift silvery white fighter 'plane appeared at a height of about 30,000 feet, somewhat above the summit of Nanga Parbat. It circled systematically over the area of the ascent route and then disappeared again. It was not until later that we learned that our progress had been photographed and circulated to the world's press through Reuters.

Ertl wanted to go up to the ice cave at Camp IV to shoot some film, but it so happened that the porter who was carrying his gear dropped out on the way up and had to return. There was quite a row about this. By the evening we were all, every one of us, feeling worried and depressed, and owing to the mishap with the kitchen tent there was no warm food to be had. However, Aschenbrenner said that to his knowledge, snow conditions on the mountain had never been better. If only the weather would hold. Time was running out and any day the weather might break. The shortage of porters was a constant anxiety and there was always one dropping out for one reason or another. We kept thinking how a few trips with a helicopter would have solved all our problems.

The next day, 21st June, a Sunday, was splendid, with a temperature of 23° C. below freezing, according to Aschenbrenner ideal summit weather. The new kitchen quarters had not yet been prepared and Ertl had to cook in the open with his feet still in his sleeping-bag. Kuno Rainer, pioneer of our enterprise up to Camp IV, was far from well. This was a bitter blow to him as he had been just living for the final assault. But he was determined to go up to Camp IV with Köllensperger. Seven Hunzas followed them after an hour. For quite a while one could watch them stamping up in formation, resting in between times in a line, like sparrows on a telegraph wire. We hoped that on the following day the spearhead with the porters would be able to establish the final camp, Camp V, on the

East Arête itself, but it looked as if our luck was out again; the weather changed around midday. The Karakoram Range was wrapped in cloud and only the highest peaks, Chogori (K2), Masherbrum and Rakaposhi, were visible above them.

Kempter writes of this glorious Sunday in Camp IV where he was with Buhl:

"We got up at seven. The weather was fine again and it was our first almost windless day up here; the sea of clouds still lay below. We ascended the Rakhiot Ice-wall once more making the lower section safe for the porters. For the first fifty feet of the traverse from the Gap to the ridge we were confronted with a sheet of smooth ice and Buhl had to apply himself to the strenuous business of step-cutting. Then we swung up leftwards over a steep slope of hard, compressed snow to Rakhiot Peak. After a rest on the summit we dropped down again towards the East Arête and from there made the trail to the Moor's Head where we left a snow shovel with which to dig an ice cave for Camp V later on. At 3.30 p.m. we turned back to the Rakhiot Gap. We were covering the very stretch on which Willy Merkl had struggled and died in 1934 and our thoughts on this produced a curious sensation. We had been on the go all day and were tired and hungry when, in the evening, we finally reached Camp IV. Rainer and Köllensperger were there with three porters who were to carry loads up to Camp V on the following day. Ertl had been there too but had gone down again to Camp III with four porters as there was not enough sleeping equipment available in Camp IV for seven porters. The three porters left behind had none of their own food with them and so we had to provide for them out of our own already depleted rations.

"On the following day (Monday, 22nd June) I was up at seven. The weather was not too bad, but it was misty and later light snow began to fall. Our three porters complained of fatigue. They had been unable to eat the unfamiliar food and did not therefore feel like work. We pondered for a long time what we should do. Buhl was of the opinion that we should carry the loads up ourselves, but it was my view that if we did we should only be wearing ourselves out at a time when we ought to be conserving our strength for the supreme trial ahead of us. We finally decided to wait until another batch of porters came up from Camp III, which suited me as I was tired and had a headache. In any event there would be little chance of reaching the summit with porters like the three who were with us now.

"Nevertheless, Buhl carried a load to the Rakhiot Gap by himself and was back again in four and a half hours. Now, to add to our troubles the petrol ran out and we had to try to cook with solid fuel. After three hours' trial and tribulation we managed to produce some soup with *Würstchen*. In the course of the afternoon Rainer set off to go down to Camp III as he was still far from well, but he was back again after a short time as he had not felt strong enough to make the descent alone. The crack in our ice cave had split open again, and there was an abominable draught, but I was feeling too apathetic to do anything about it."

During the night of 22nd June almost two feet of new snow fell. This meant that all the trail-making up to Camp IV had once more been in vain, except for one or two places where the wind had cleared the track again. At Camp III snow continued to fall and the atmosphere was oppressive. Walter Frauenberger and Aumann came up with four porters and porters' provisions, and a tin of potatoes for us, a delicacy which helped us to forget our cares for a while. Four fine days and then—bad weather again. It was enough to make even the most optimistic of us despair. Everything revolved round the shortage of porters. A porter service which could have assured quick consolidation of the high camps would have needed three times the funds we had had at our disposal. In the evening we were regaled with a heavy thunderstorm and the new kitchen which Ertl had built was almost crushed.

On Tuesday, 23rd June, there was more new snow around Camp III. All tracks were obliterated. Of the six fit porters three were despatched to Camp II to open up the trail for the men coming up. It was out of the question to attempt to get to Camp IV. As visibility cleared we could see four men coming down from far above us. One of them was obviously very weak, for he kept falling into the snow and lying where he fell. The weather was treacherous beyond belief. Two hours previously it had been so cold that one could hardly grasp a pencil; now at midday the sun suddenly broke through and it became so warm that one dare not venture outside the tent without a topee.

The four men—Kuno Rainer and Hermann Köllensperger and two porters—arrived. The porters were totally exhausted and we had never seen Rainer and Köllensperger in such a bad state. They said that their stay at Camp IV had been a terrific strain, further aggravated by the blizzard, and that the camp still needed consolidating. Kuno had not properly recovered from his illness and obviously would not be able to partner Buhl on the summit assault. It was to be hoped that Kempter would prove a good substitute.

In the afternoon Buhl suddenly came down. He said he was bored at Camp IV and anyhow he needed petrol for the Primus which was not working properly with solid fuel. He intended to return to Camp IV in the evening. He appeared to be in excellent form. Later he changed his mind and, although there was no spare sleeping-bag, decided to stay the night. The evening was spent talking, mainly about Munich *Bretzel*, new bread and fresh vegetables.

Kempter describes his grim stay in the top camp on the previous day:

"Buhl and I were still lying down when Rainer came into the cave and tried to make himself some tea. Then he went down with the two sick porters to Camp III. After a while Köllensperger appeared and declared that he was going down too as there was nothing for him to do up here. Buhl got up with the idea of brewing himself some tea and when he failed to get the stove going he flew into a rage and announced that he was also going down to Camp III to get some petrol.

"So I was left alone in Camp IV. I got up with the intention of clearing the entrance to the cave, but I was alarmed to discover how weak I was. I could hardly manage three shovelfuls without taking a rest. With enormous effort I made myself a drink and ate a few slices of frozen sausage and, gritting my teeth, set to work again with the shovel. Then, after resealing the crack in the cave I gathered up all my belongings and moved into Rainer's and Köllensperger's tent, where it was not quite so cold. For the second day nobody had come up from Camp III and I decided that if I felt no better by the morning and if no one else turned up, I would go down too."

The next day, 24th June, all the tracks were opened up along the Rakhiot glacier. Bitterling and Aumann battled their way through to Camp II with seven porters and arrived there after seven gruelling hours. From Camp II Frauenberger got through to Camp III with two porters and arrived at 2 p.m. He had had to climb in scorching heat and was badly sunburnt; nevertheless there was great excitement as always when anyone arrived from below. The fact that he brought fresh butter was in itself an occasion for celebration.

Everyone was eating and sleeping satisfactorily; Kuno Rainer alone gave cause for anxiety. He was so determined to throw off his illness and regain his strength that he kept dipping into the oxygen to try to ease his breathing. He insisted on going up to Camp IV the next day. If he found he could not manage it he intended to take over the shuttle service through the Great Ice-fall and so release Bitterling.

Kempter came down from Camp IV, but early in the morning Buhl took four porters up there. He hoped to tackle the Rakhiot Ice-wall once more on the morrow. One of the porters gave up in spite of all Buhl's efforts to encourage him to keep going. Buhl was tactless enough to express relief when he saw that he was only carrying Ertl's film gear! Ertl was furious and the inevitable row followed. In the end Ertl shouldered the load himself.

The next day, 25th June, Buhl tried to take two porters through the Rakhiot Ice-wall, but got stuck. The porters were afraid. Persuasion was of no avail. They refused to go up the steep exposed wall in spite of the fixed ropes. Buhl showed signs of dejection for the first time. We all knew only too well how badly our youngsters needed rest. All were suffering from fatigue from the incessant struggle against bad weather during the period of consolidation and through the indescribably strenuous work of trail-making which had had to be done over and over again. Frequently too, to keep things moving, they had had to act as porters.

In spite of intense cold Rainer set off with Köllensperger at 5.30 a.m. to escort three porters, carrying among other things the oxygen equipment, to Camp IV, but Rainer had to give up; there was absolutely no strength in his limbs.

In the evening all the youngsters came back to Camp III to recuperate. Camp IV was not a fit place for anyone to stay for days on end in the weather we were having now. Kuno Rainer went on down with seven porters, still confident, in spite of advice to descend to Base Camp, that he would be able to supervise the transport service through the Great Ice-fall.

The elimination of Kuno Rainer from the assault group was a serious blow to us all. Aschenbrenner too would have to leave us soon. It was part of his contract that he should be allowed to return to Europe at the beginning of July. Frauenberger was then to take over the leadership of the climbing team. But first of all there was to be an all-out effort to establish Camp V on the East Arête with or without porters. If the weather held for only five days the first assault could go forward.

On the following day, 26th June, Rainer continued his descent from Camp II to Camp I. Aschenbrenner, before taking leave of Nanga Parbat, wanted to visit Camp IV. He writes:

"Of the nine porters in Camp III only five could be persuaded to carry loads up to Camp IV and they took seven and a half hours over it. Three were prepared to stay above, but had to go down again in the afternoon because they fell sick. This meant that the climbers would have to carry all the loads to the East Arête. Ertl declared himself ready, if necessary, to carry loads across the wall in the supreme effort to establish Camp V on the East Arête.

"I was appalled at the state of Camp IV. All the tents were filled with snow and a *Bergschrund* had opened below the site, in which one was very liable to lose things and which caused a terrible draught of bitterly cold air. I really wondered how the youngsters had been able to stick it out there."

Aschenbrenner returned to Camp III as the beginning of his final descent and return home. There he met Frauenberger and handed over the leadership. Frauenberger also wished to support the assault himself to replace Kuno Rainer.

The evening turned windy and cloudy. It looked as if the weather was once more deteriorating and we all watched it anxiously.

On his way down to Base Camp Aschenbrenner met the indomitable Kuno Rainer taking porters through the ice-fall to Camp II in order to supply the high camps with much needed petrol. He moved with the utmost difficulty and complained that he could no longer bend his right leg. In spite of all this he saw his task through to the bitter end and escorted his men right up to Camp III. With this batch of loads the provisioning of Camp III was completed and no further transports were necessary. When Kuno Rainer returned to Base Camp he was suffering increasingly frequent and severe attacks of pain in his leg and was badly depressed at his inability to share in the assault. I diagnosed phlebitis. Thus Kuno Rainer, Buhl's natural partner, was obliged to spend the crucial days of the expedition in Base Camp. The sympathy of all of us went out to him. Buhl, meanwhile, had not entirely shaken off his cough but was continuing to go all out, not sparing himself. Köllensperger was out of action with severe toothache.

On the eve of the 27th June, the day on which all available climbers were to join in one concerted effort, the sky assumed an aspect of mystic foreboding—I can think of no other way of describing it. While the Rakhiot valley lay in deepest shadow and the mountain-sides were lightly swathed in a fine veil of mist, the peaks encircling the Rakhiot valley were illumined in intense and dazzling silver. As layers of mist, flooded in pale moonlight—the moon itself was not visible—crowded around the flanks of the Silver Saddle, our thoughts sought the summit, which, though concealed from our gaze, lived all the more vividly in our imaginations, lifting its snowy crest above the enchanted landscape of Kashmir. Would the assault party, in the few days which still remained before the breaking of the monsoon, succeed in their attack on the last bulwark of this stronghold of rock and ice—or should we too have to capitulate and give thanks that the whole team had returned intact? Most of us were still confident in victory, and even the natives in Gilgit had told us that Nanga Parbat would be sleeping and that we had therefore picked the best possible time for our attempt. They had made no such happy predictions for the Americans who were on their way to the Karakoram. How did one account for this? Could it be that these people of the Orient possessed a sixth sense denied to us over-civilized Europeans?

On the following day we in Base Camp were able to observe a group of four men moving up the west flank of the main ridge between the Chongra Group and Rakhiot Peak to Camp IV. They were Frauenberger and the three youngsters (Buhl, Kempter, Köllensperger). Unfortunately there was every indication that the monsoon was about to break.* Indeed, in the course of the afternoon, heavy, snow-laden clouds were already reaching the area.

Low barometric pressure—new snow—monsoon—but nevertheless an assault on the summit! Surely this could only be one last gesture of defiance against the overwhelming forces of nature. So it was in 1934 when Willy Merkl and his men dared an advance to the East Arête in late August, and so it would be with our friends on 28th June, 1953. Hermann Köllensperger wrote as follows:

"I slept tolerably well during the night though I had to take a tablet now and then to allay the toothache which was bothering me. I got up at seven as it was my turn to call the others. Melting snow was a time-consuming business, to say nothing of the petrol, and it was a good hour before I had a small kettleful of water. Having got this far I succeeded in knocking the whole lot over—awkwardness of movement seems to be one of the concomitants of high altitude activity—and I had to start the whole procedure over again. Finally, at 9 a.m. I was able to inform my comrades that I had a hot drink ready for them. While we were still partaking of our modest breakfast the weather began visibly to deteriorate. Dense layers of mist gathered around the ridge and visibility in the direction of the main summit reduced rapidly. Nevertheless we intended to attempt the ascent.

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*See footnote on p. 107

"We waited for the time being on the assumption that porters would be coming up from Camp III who could then support our advance. We hung about in vain until nearly 12 o'clock and then had to tackle the ice-wall without porters just the same. We intended to-day as a final effort to carry up the stuff for Hermann Buhl and Otto, and dig a snow cave for them on the Moor's Head. Then on the following day these two would make an attempt on the summit. We made the steep ascent of the Rakhiot Ice-wall which Buhl and Kempter had already secured with fixed ropes. Now and again the loose new snow would break away and a great slab would travel downwards. It was 3 p.m. when we reached the gap in the Rakhiot North Spur; the mist was thickening and it was already snowing lightly. The subsequent traverse of the Rakhiot west flank was rather tricky as the rocks were partially glazed but there was quite a good snow-covered stretch upon which our feet could get a firm grip. Then our progress was once again obstructed by a steep ice-covered protuberance of solid *névé*. Buhl reconnoitred for some alternative way through and, cutting steps as he went, he soon disappeared from sight. Further on he found good snow again. We now threw a rope across the offending obstacle; Kempter negotiated it and then it was my turn. I was halfway over when I slipped slightly and suddenly lost my balance. Automatically I gripped hard on the rope, one of the belaying ice-axes was prised loose and I fell about thirty feet. Fortunately Buhl kept a firm hold on the second ice-axe and so I was able to save myself. I quickly pulled myself together—it had been quite a nasty moment—and we carried on with the Rakhiot traverse. Meanwhile the mist had developed into a dense fog and it was snowing heavily. Otto stopped dead in his tracks and said he thought it was foolhardy to go on. There was absolutely no chance that the weather would improve and in any case there was far too much snow about. Furthermore we had to bear in mind the fact that it was already 5.30 p.m. and we had to get back to Camp IV. Walter and I were inclined to agree with him, but Buhl was reluctant to accept the position. However, he finally had to admit that it was pointless to try to rush the summit in the present highly unfavourable conditions and we retraced our steps over the traverse to the gap and then down the ice-wall by way of the fixed rope. We were just about at the end of our tether and were much relieved when, in darkness, we finally reached the tents of Camp IV. It was not until we were inside our sleeping-bags and had had a good draught of Munich Löwenbräu that we began to feel more like ourselves again."

Such was the outcome of the first assault.

On 29th June the weather around Nanga Parbat was indubitably bad, and our morale was proportionately low. We were all convinced that the monsoon had overtaken us. Only Buhl was still keen on bringing home some success for the sake of prestige, such as an ascent to the Silver Saddle or to the Fore-Summit.

Our young spearhead group had now been hard at it for weeks and were naturally feeling the strain; it was not to be wondered at that the foul weather which had now descended on us should have depressed them badly and taken some of the heart out of them. Furthermore, Kuno Rainer, who until his illness had been the toughest of the lot and always in the vanguard, had now been laid up in Base Camp for days applying compresses to his bad leg, hoping against hope to be able to render service once again. Walter Frauenberger was also feeling under the weather, although he managed to remain his usual cheerful self. He alternated between Camps III and IV working hard to keep things going, but he maintained that most of the porters were also badly in need of rest.

At the same time none of us, Base Camp or Assault Group, had actually given up hope and we now set about working out a new plan of attack which would have regard to the jaded condition of the team and the imminence of the monsoon. The idea was that the whole team should first recuperate at Base Camp in preparation for the second assault which would then be launched with renewed vigour. Aumann, Bitterling and those porters who were fit for work refurbished Camp I and checked over the stores deposited there. One of the large tents was sub-divided and ladders were constructed and carried up to bridge the crevasses below Camp II which were yawning ever wider and becoming more and more dangerous.

On the evening of 29th June some of the porters of the Isa Khan group who happened to be in Base Camp, undertook against an additional payment of ten rupees a time to carry loads over the Rakhiot Ice-wall to the Moor's Head. Although there was always the possibility that they would back out at the last moment, we allowed ourselves to be somewhat cheered at the prospect.

Hans Ertl, now supporting the assault team, wrote me the following letter on 29th June, i.e., the day after the unsuccessful attempt, the outcome of which Ertl still did not know:

> "Dear Karl,
>
> "In spite of driving snow three porters have just come up from Camp II with mail, porters' provisions and radio equipment. Bitterling left us yesterday morning and you will by now have had all the news from him, so I will stick to essentials. Yesterday Buhl, Kempter, Frauenberger and Köllensperger set out from Camp IV (on Rakhiot Peak) to try to establish Camp V. I could see them performing on the rope with only light loads and imagine (*wrongly as it turned out later*) that they have now fitted out Camp V with the first essentials and are back again in Camp IV. It has been snowing here without a break ever since yesterday afternoon. It is the typical monsoon snow, which quickly shrivels away again. . . . In spite of the breaking of the monsoon I do not consider the position to be quite hopeless. We shall have to be patient for a few more days. . . . But we must see this thing through to the bitter end now in spite of the monsoon and whatever the cost. I'm sure we shall bring it off even if it takes longer than we bargained for. . . . It is to be hoped that Kuno's condition will improve. . . . I advise a change of tactics: there should be no impetuous all-out dash for the summit but a steady well-considered build-up from camp to camp."

In such manner did we try to bolster up each other's morale.

CHAPTER V

The Turning Point

THE MORNING of 30th June was a memorable one, for it ushered in something that none of us thought possible—a sudden and complete change in the weather. The sky was swept clear of cloud as if by magic. The hygrometer sank to 50% humidity, and in the course of the next few days dropped even further to 25%. None of us dreamed that this brilliantly beautiful weather was to last for a whole fortnight.

I will quote what Walter Frauenberger had to say about events during the two glorious days which followed:

"Hermann Köllensperger had gone down to Base Camp as he had never fully recovered from his exhaustion following the first assault and was suffering badly from toothache. The four of us who remained, Ertl, Buhl, Kempter and I, received the command from headquarters that we were all to descend at once without fail; the monsoon had come and everyone needed a rest in Base Camp. But at noon there was a clear sky again and we insisted on remaining up in Camp III to see how the weather would be on the following day. But the order from Base Camp was renewed: we must descend at once. After a few exchanges through the walkie-talkie apparatus we were able to convince headquarters that we were still in good form and that if the improved weather held, our imminent assault had good prospects of success. We were all feeling wildly enthusiastic, partly because of the splendid weather which the evening brought, partly because we wanted in any event to convince headquarters of our point of view."

There was great satisfaction at the excellent performance of our radio connection between Base Camp and Camp III. Voices could be heard as distinctly as over a metropolitan telephone line. Frauenberger continues his report on 1st July:

"The splendid weather, notwithstanding the very considerable danger of avalanches, encouraged us to make the ascent to Camp IV with the three best Hunzas: Ali Madad, Hadje Beg and Hidaya Khan. Kempter stayed behind in Camp III with the porter Madi and planned to join us the following day. We were able to keep in constant touch with Base Camp throughout the ascent. Arrived in Camp IV, I made it my business to look after the Hunzas: I fitted them out with crampons, made tea for them, and talked to them all the time to gain their confidence. For to-morrow would be decisive. If we could coax the porters across the Rakhiot Ice-wall (to be prepared by Buhl and Ertl the same afternoon) the assault could begin within two days. But if we failed to get them across, as had happened so often before, then we should have to admit to being beaten once and for all.

"Camp IV was completely snowed in. One could just about see the pointed gable ends of our tents but the porters' tent was no longer visible and we had to probe around for quite a while before we found it, its apex eighteen inches below the surface. We dug for a whole hour to find the entrance to our ice cave, concealed beneath a six-foot snow-drift. We then cleared the cave of snow, shifted the porters' tent and dug out the other tents. There was thus a great deal of work to be done and each one of us plied his shovel with feverish enthusiasm as though in search of buried treasure.

"While everyone was engaged in making up the loads for the following day—storm tent, Primus, petrol, food, sleeping-bags and the other essential things—I had another go at the porters. I tried gentle persuasion and it proved successful. They declared themselves willing to negotiate the ice-wall with us on the following day. In spite of promises this was something we had not quite dared to expect and we all felt elated.

"The same afternoon Ertl and Hermann Buhl, armed with coils of rope, ascended the Rakhiot Ice-wall and hacked as they climbed a most handsome series of steps in the exposed flank which was so dreaded by the porters. By the evening, all of us in Camp IV were completely exhausted. It was late when Ertl and Buhl returned from their task on the ice-wall and they fell straight into their sleeping-bags.

"Otto Kempter had spent the day in Camp III, eating and sleeping, trying to build up his strength again. On the following day, 2nd July, while Ertl, Buhl and I were in Camp IV preparing with the porters for the impending ascent of the ice-wall, Otto Kempter had left Camp III for Camp IV accompanied by the porter Madi. He was with us by 8.30 a.m., fit and in good form again."

On 2nd July, 1953, Base Camp was more like a military hospital. Kuno Rainer was having severe pains in his right leg, Hermann Köllensperger was suffering agonies of toothache while Albert Bitterling had acute pharyngitis. Aumann was devoting all his energies to the care of his sick comrades while the others were deploying in readiness for the second assault.

From time to time I scanned the heights through our large fixed telescope. At just about 1 o'clock I observed at least eight men sitting on the Rakhiot Gap at a height of close on 23,000 feet, that is to say, *above* the ice-wall. At first I simply could not believe my eyes. Then Aumann joined me, Rainer hobbled along, and finally Köllensperger and Bitterling came too. We were all beside ourselves with joy! So the Hunzas had managed the ice-wall after all! We all realized that this unexpected success must have been achieved by some extraordinarily skilful negotiating on the part of Walter Frauenberger.

Later we watched our comrades traversing the Rakhiot West Flank, one of them with a cloud on his back, and a short time afterwards we saw two porters, secured from above, approaching the East Arête.

Hermann Buhl has told how on 2nd July he and his comrades took the four porters through the ice-wall:

"We set off as soon as Otto Kempter, still quite fresh, arrived with Madi, and by 9 a.m. we were all hard at it on the ice-wall, Ertl, Frauenberger, Kempter and I, each with one porter on the rope. We were gratified to observe that the Hunzas were working their way up quickly and confidently along the fixed ropes. They had apparently soon lost their fear of the yawning abyss. Perhaps all their attention was rivetted on their feet and the rope and they did not realize how exposed was their position on that gigantic wall of ice. On the traverse everyone had to wait while I made absolutely certain of our safety precautions. Madi had to turn back at the Gap as, owing to the enormous size of his feet, Frauenberger had been unable to fit him out with crampons. Without a word Frauenberger added Madi's load to his own.

"From here, deep snow led up towards the dip in the East Arête near the Moor's Head (23,000 feet) where we treated ourselves to a good long rest. The weather was still fine and the wind on the ridge was not unbearable."

On the expedition of 1934—the only one to establish itself on the East Arête—two camps were put up along the great snow ridge: one (VI) nearer Rakhiot Peak, the other, already mentioned, beyond the Moor's Head on the Whipped Cream Roll (VII). Owing to our porter problem we had to cut out the nearer camp. Buhl wanted all along to place our final camp (now V) at least on the Whipped Cream Roll or even further so as to push the assault base as far up the Arête as possible. Buhl continues:

"Naturally we left nothing untried to get the porters up along the ridge. But there was nothing doing. Once we had reached the lowest point in the declivity after the Moor's Head they lay down on the hard snow and refused to budge another inch.

"It was in any case getting rather late, so we sent the porters back to Camp IV with Frauenberger and Ertl who were waiting at the Moor's Head. Otto and I stayed and put up our tent."

This tent stood in the deepest indentation of the East Arête between Rakhiot Peak and the Silver Saddle at an altitude of 22,640 feet. The summit altitude was 26,660 feet. On the route between, a descent had to be made into the Bazhin Gap which meant a loss in altitude of some 300 feet. The summit pair had therefore to overcome a difference in altitude of altogether 4,300 feet—a point which had been discussed at length with

Hans Ertl and Walter Frauenberger on the day before. The assault plan was therefore regarded from the outset as being one which carried exceptional hazards. The men of the summit team, Buhl, Kempter, Ertl and Frauenberger, realized that the prevailing weather offered a possibly unique opportunity, one in fact that must be grasped at all costs. No one of course had any idea that the good weather would hold for so long.

In the circumstances it was thoroughly understandable that the two older men, Hans Ertl and Walter Frauenberger, should have encouraged the younger ones to venture upon the assault forthwith, without waiting for the establishment of a further camp. Hermann Buhl and Otto Kempter were indeed of the same mind.

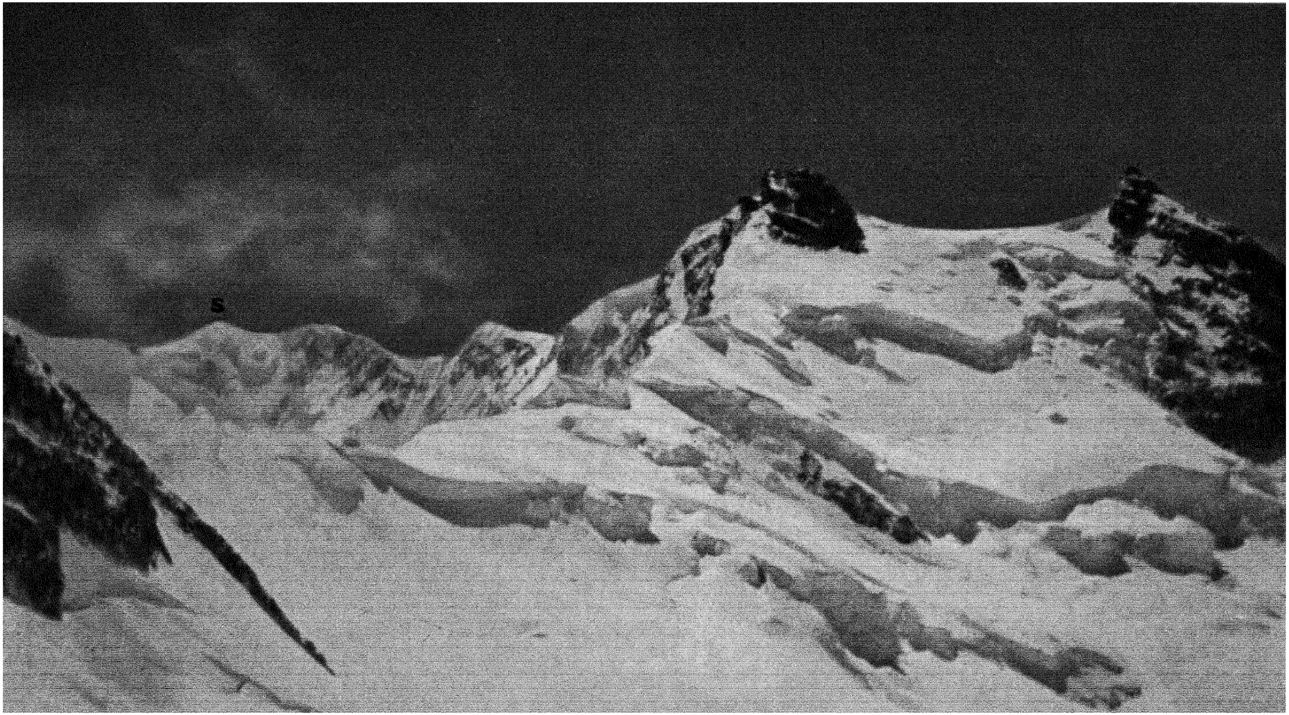
It was an impressive experience for every man, Sahib or Hunza, who stood that day on the East Arête. As the gaze travelled upward, it was caught and held by the matchless beauty of the Silver Saddle and then drawn away again as if by a magnet to the awesome, stupendous Rupal precipice. This, the most spectacular mountain-face in the world, plunged in one unbroken drop of 15,000 feet from the supreme summit of Nanga Parbat to the floor of the Rupal valley.

As the little band filed past the Moor's Head they looked with silent grief upon the last resting-place of Willy Merkl and his orderly, Gay-Lay. Walter Frauenberger had with him a small memorial tablet which he intended later to fix into the black rock which marked their grave.

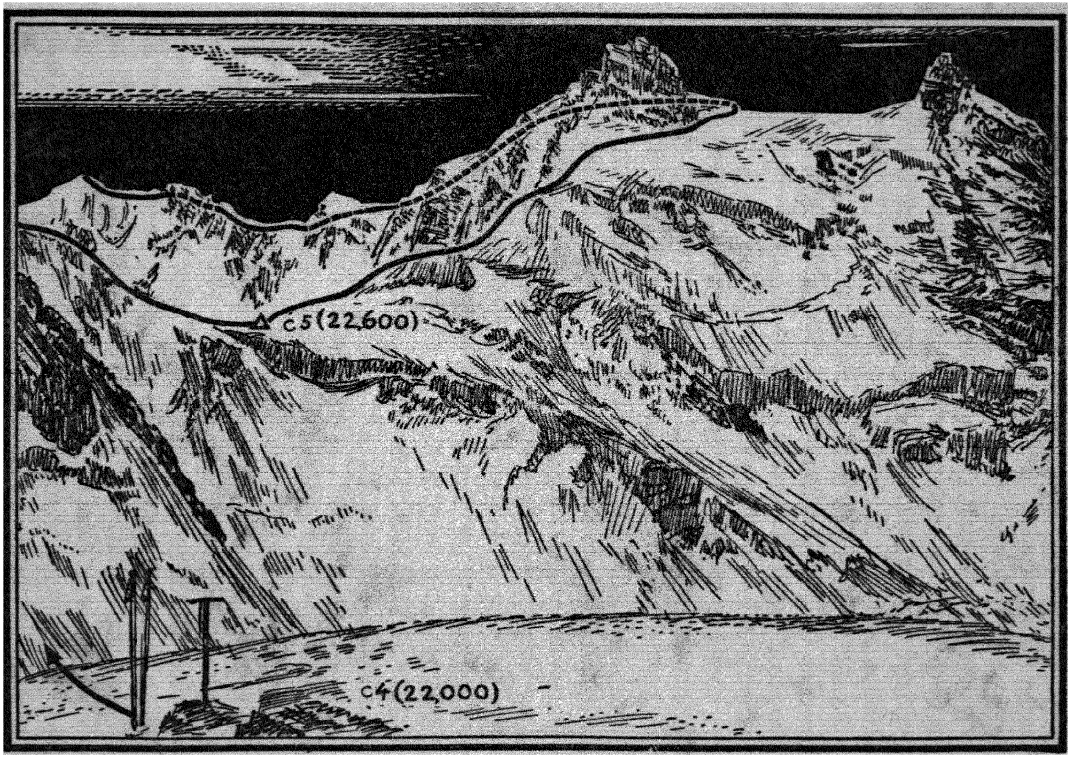
The incomparable East Arête, swinging its elegant arc up to the two proud pinnacles flanking the Silver Saddle, was an already familiar sight from the hundreds of photographs that had been studied, but nevertheless the reality was breath-taking. It was all more massive, more beautiful, more puissant than anything that could ever have been imagined. They saw before them the traverse below the gleaming rim of the Silver Saddle where Willo Welzenbach and Uli Wieland had breathed their last. This white withdrawn world was glittering now beneath a benign sun, yet every man knew that a snow-storm at this altitude could transform all this beauty into a nightmare and that they could in a trice find themselves in mortal danger.

NANGA PARBAT

Hermann Buhl's ice-axe on the Summit Firn, flying the Tirol pennant which Buhl took back to his club. The Pakistani flag was left there. View down to the Silver Plateau with (1) Silver Crag and (2) South-east Summit from which the East Arête can be seen leading down. In the background the Karakoram Range



East Arête and Silver Saddle. In the background the summit structure. The Rakhiot Ice-wall is seen rising to the left


EAST
ARÊTE
C5(22,600)
C4(22,000)

Route to the Summit

Eventually the sunshine forsook the ridge and immediately it became bitterly cold. This is how Otto Kempter writes of the hours which followed:

"It was close on six in the evening and we were still busy mooring down our small tent. We had not pitched it actually on the ridge but had placed it rather into its flank so as to have some protection.

"In the light of the setting sun we watched our comrades traversing the Rakhiot West Flank with the porters and shouted down to them. Then without further delay we crept into our tent and I started cooking, first to quench our raging thirsts and then to fill the flasks for the following day. It was all very difficult in the confined space. At eleven I turned in. Hermann Buhl had been lying down in his sleeping-bag since nine, but could not get off to sleep. The low roof of the tent was pressing down on him like a dead weight and finally a storm sprang up and raged across the ridge, causing us serious concern. Our tent was standing a bare fifteen feet from the edge of the precipice and a strong gust could rip it from its moorings and sweep it down into the abyss. Finally Hermann got up and secured the tent further with ski-sticks and ice-axes. When he had satisfied himself that all was well he settled down again and tried to get some rest.

"At around midnight the storm abated somewhat. Hermann still could not get to sleep. He told me afterwards that while from eleven onwards I had been dead to the world, thoughts of the impending ascent had been going round and round in his head. However, I had been asleep for barely two hours when Hermann roused me. He said it was time to be off. I found it so difficult to drag myself up from the well of sleep that I did not at once grasp what it was all about. I had after all on the previous day first come up from Camp III to Camp IV and then, without a break, had gone from Camp IV to Camp V, and climbing at this altitude made exceptional demands on one's physical reserves. I was now expected to have recovered from this after only two hours' rest and to start off at once on the longest and most difficult ascent of my life. Who could blame me for feeling tired? Still half asleep I told Hermann that we had agreed on a later hour for getting up, but perhaps one of us was under a misapprehension. It was some time before I had fully returned to consciousness. . . .

"Hermann had set off shortly after 2 a.m. By the time I was fully dressed and had collected up all my gear it was close on three. I followed in Hermann's track along the ridge to the Silver Saddle. Conditions were pretty good. Hermann had evidently not had much to do in the way of trail-making. Gradually a day dawned which promised to be as fair as its predecessors. At 8 o'clock I reached the Silver Saddle. Buhl was about three-quarters of an hour's march ahead of me all the way. When I arrived at the plateau I rested and took some refreshment, for I was feeling horribly low. When I started off again Buhl was already a decent way across the vast *Firn* plateau.

"Things were beginning to go badly with me. I suddenly felt so tired and so utterly enervated that every now and again I had to sit down and rest. Moreover the sun was blistering down on to the *Firn* to such an extent that one could have gone around in bathing trunks. When I sat down for the third time I just fell asleep.

"It was 9 o'clock when I woke again and found I was feeling no better. Meanwhile Buhl had disappeared from sight. I decided to wait for him up there on the plateau.

"I continued to feel so utterly worn out that I lost all initiative and, half dreaming, half sleeping, taking a few photographs in between times, I spent the rest of the day on the Silver Plateau waiting for Hermann. Again and again I peered up at the shoulder which led to the summit's crest but I could see no sign of Buhl.

"I wondered what I should do about the food supplies I was carrying, particularly Kuno Rainer's bacon which had been set aside as the special summit ration. I finally decided to take the lot back to Camp V as I knew that Buhl had an adequate amount of food with him. In any event where could I have left the food? The immense plateau was well over a mile across and consisted of one vast fluted expanse of great frozen undulations. It was extremely doubtful if Buhl could ever have found the supplies on his return. I therefore ascended once more to the Silver Saddle and made my way down the East Arête."

The gale which shook the tent on the East Arête during the night before the assault, was felt also in Camp IV. Frauenberger feared another break in the weather and renewed failure. But Ertl, as always the first up, reported at 6 o'clock that both Buhl and Kempter could be seen above the "Whipped Cream Roll" and were apparently unaffected by the storm. Naturally the two men in Camp IV now kept close watch on Buhl's and Kempter's further progress. At seven Buhl disappeared in the blue haze of the Silver Saddle and Kempter followed at a quarter to eight. Ertl and Frauenberger had no telescope and could not hope to follow the ascent any further.

The plan was that Frauenberger and Ertl should take a further convoy of porters up to Camp V, carrying among other things another tent so that the entire team of climbers could be accommodated there. But all the Hunzas declared themselves *bimar* (ill) once again, although they promised to go up to Camp V on the following day. In the afternoon Frauenberger went up to Camp V alone, to keep in touch with the assault team. He spent a long time at the gap on Rakhiot Peak to keep a look-out, and very late saw one solitary figure coming down from the Silver Saddle. What had happened to the other one?

While all this was happening everyone in Base Camp was in a state of extreme tension. All of us, with the exception of Kuno Rainer, climbed Jiliper Peak under the leadership of Peter Aschenbrenner, hoping from that vantage point to have a good view of the summit massif, but unfortunately this was not the case. We observed, however, that the weather was holding. This gave us hope. Köllensperger, who had been ordered down from Camp IV for recuperation with the possibility that he and Rainer might make a second assault team, demanded to go up at once.

At 6 p.m. we returned to Base Camp and learned from Rainer that Walter Frauenberger had come through with a most disquieting message: A single climber had appeared on the Silver Saddle shortly after 5 p.m. and was now completing the traverse towards the East Arête. It was impossible to see whether it was Buhl or Kempter.

At 7 p.m. we heard through the walkie-talkie that it had been Kempter. He had staggered into the tent a few minutes before and had been looked after by Frauenberger. He reported that Buhl's rucksack was lying beyond the Silver Saddle and that he had disappeared behind the Diamir depression. He assumed that Buhl had reached the summit.

Why had Kempter returned alone? Where was Buhl? He had no tent with him, no sleeping-bag, no food. He knew, as all of us knew, that above 26,000 feet one could not survive a night in the open. The good weather was some comfort. But the question remained. What lay in store for Buhl beyond the Diamir depression? Would he have to pass the night in an ice cave? Had he at least his Perlon emergency sleeping-bag with him, the one which we all carried in our anoraks? (As it turned out, he had unfortunately and unwisely removed it.)

During that memorable night of 3rd July we sat up long in Base Camp. We had been assured by Hans Ertl and Walter Frauenberger that Otto Kempter was safe and well. All our anxiety was now focused on Hermann Buhl. We constantly reminded ourselves that there was absolutely no doubt as to Buhl's technical efficiency. Moreover the weather was singularly fine; indeed one might encounter such weather on Nanga Parbat only once in a decade. Nevertheless sleep that night was impossible. Again and again our thoughts went up to the summit like a prayer; somewhere up there in this soft, shimmering moon-flooded night our comrade Hermann Buhl, alone but on behalf of us all, was engaged in the final combat.

At length, at 4 a.m. a new day dawned. I left my tent and walked up to the moraine mound which commemorated the dead of Nanga Parbat. The mighty soaring North-East Flank, crowned by the Silver Plateau and North Summit, drew my gaze with magnetic force.

At noon I got through to Hans. He reported from Camp V that Otto Kempter was fit and was about to come down with three Hunzas to Camp IV. At 5.30 p.m. we were able to observe him on the Rakhiot Ice-wall.

Why on earth then had they not this morning made their way up to the Silver Saddle to look for Hermann? It was after all quite possible that after his night in the open he had broken down somewhere on the Silver Plateau. A whiff of oxygen and a flask of tea might have meant all the difference between life and death.

Otto Kempter answered this question a few days later:

"After spending all day Friday (3rd July) at an altitude of 23,000 feet I would have been physically incapable of making another ascent to the Silver Saddle on the Saturday. The altitude has very far-reaching effects on the constitution. In any event, Hans Ertl and Walter Frauenberger had every intention of taking up oxygen apparatus at the earliest possible moment on Sunday morning."

At the agreed hour of 3 p.m. I again got into communication with Walter Frauenberger who said in reply to my urgent enquiries:

"No useful purpose would be served by attempting anything at this hour. And there would be no point in going to meet Hermann without the oxygen apparatus. Hans and three porters have just brought this up from Camp IV and we are now getting everything ready for Hans and me to set out for the rescue."

We at Base Camp had decided on the previous evening that Fritz Aumann and Hermann Köllensperger should go up without delay to support the assault team or, if all had gone well, to evacuate the high camps. Hermann Köllensperger had actually gone up with porters to Camp I this afternoon. Fritz Aumann was all ready to go and was only waiting to hear the result of the next communication with Camp V.

All the time suspense had been growing. I had a long talk with Bitterling who had borne a large share of the responsibility right up to the launching of the assault. He had come down from Camp IV two days before. Our sole topic was Hermann Buhl's lone exploit. What we were both thinking but neither dared to put into words was that a solo climb on a 26,000 feet peak in whatever conditions entailed the greatest risks which a climber, even one of Hermann Buhl's calibre, could embrace. Mummery, the most illustrious mountaineer of his day, had paid for such a solo climb on our own Nanga Parbat with his life.

On the afternoon of 4th July the three climbers up in Camp V, Hans Ertl, Walter Frauenberger and Otto Kempter, were also plagued by the darkest forebodings. Ever since Kempter's return at 7.15 p.m. on the evening before, there had been unceasing vigil for Hermann Buhl. In the early morning of 3rd July Kempter had seen him disappear in the direction of the Fore-Summit, a tiny speck in the immensity of the storm-torn plateau. Nothing more was known. At 5 p.m. Base Camp again got through to Camp V. Nothing had been seen. An oppressive silence reigned.

Meanwhile Ertl had come up once again from Camp IV with three porters on his rope. They discussed how best to organize the rescue should Hermann Buhl still fail to return that day. Again and again their eyes searched the Silver Saddle while the hours of early afternoon crept by in slow torment. There was nothing to be seen, not a speck, not a spot, not a sign.

Walter Frauenberger reports:

"At 5 p.m. we were once again in communication with Base Camp. We could offer no reassurance. Then Kempter, Ertl and I with the porters went back over the gentle incline up to the Moor's Head. Not a word was spoken. This was not only because of the anxiety which was gnawing at us all, nor was it entirely due to the strain which every movement at this height entails.

"We were about to perform a short ceremony in honour of Willy Merkl, Willo Welzenbach and Uli Wieland, the dead of 1934. This was something that had been arranged beforehand and I had already put the memorial tablet into position. I now thought it necessary to get it more firmly embedded into the rock. I would attend to this later. The ceremony went ahead. The porters at our side understood why we were gathered here in silence. Hans Ertl filmed the proceedings and returned to his tent. Otto Kempter broke off a few lumps of rock to take down to Karl, then with the three Hunzas he went down the other side of the ridge to traverse the western flank of Rakhiot Peak and descend across the ice-wall to Camp IV.

"Left alone I was scarcely able to work. It had become bitingly cold and the tent below me was already in shadow. My eyes strayed up along the ridge, up to the Silver Saddle, again and again. . . . Then. . . . I could not believe my eyes. . . . I stood quite still to make doubly sure . . . yes, it was true! A tiny black dot detached itself from the rocks on the Silver Saddle, passed below the rim on the sky-line and was now moving on downwards. . . ."

CHAPTER VI

The Summit

I WILL NOW quote Hermann Buhl's account of the events of 3rd July:

"As I had been quite unable to sleep I was glad when it was 1 o'clock and time to get up. The storm had abated somewhat but it was still pitch-dark. Otto was well tucked into his sleeping-bag and seemed oblivious to everything. He did not stir although I made a terrific clatter as I rooted around in the tent, brewed tea, dressed and packed my rucksack. Several times I urged him to get up, but he kept saying that it was too early and that yesterday I had said we would rise at 3 o'clock. I reminded him that we must make the fullest possible use of the day ahead of us and that we should be glad later on of every minute we gained now. I added that in any case I should be setting off at two and that if he were not ready I should have to go on alone. For the time being I packed everything necessary into my own rucksack which made it quite a weight.

"Eventually Otto emerged from his chrysalis. I now thought that if I went on ahead and made the trail Otto would easily overtake me, and so that I should not have to carry everything myself I left some of the stuff behind for him, among other things Kuno's bacon, which was to be the summit ration. I was later to regret this bitterly. At 2.30 a.m. I crawled out of the tent and started on my way.

"The night was star-lit and the crescent moon threw her silvery light along the ridge which stretched away ahead of me. It was calm and cold. I put on everything I could. Across a hard steep spur of compressed snow I regained the top of the ridge.

Here on the spine the going was treacherous. I buckled on my crampons and felt able to move with greater freedom. In thrilling soaring leaps the ridge rose steeply before me. To the right giant snow slopes, broken by icy barriers, plunged to the plateau above Camp II; to the left my way was skirted by dark rock formations, while beyond the eye was lost in unimaginable depths. A biting wind came up from the south and forced me on to the Rakhiot side. At the start of the traverse to the Silver Saddle I paused for a rest. It was 5 a.m. and behind the Karakoram the sun was rising in golden splendour. Caught in the brilliance of the first rays an undulating sea of summits greeted me: beautiful Chogori, trapezoidal Masherbrum, the bishop's mitre of Rakaposhi, the black granite of the Mustag Tower. In the valleys a fine mist hovered, the best of weather portents. Blissfully I basked in the early sunshine as I took my morning refreshment. Otto was still a good way behind me—I estimated it at an hour's climb—but I never doubted for a moment that he would eventually catch up with me.

"The *Firn* was hard and in places patches of bare, bluish irridescent ice came to the surface. Distances were most deceptive. The rocks of Silver Crag stubbornly refused to come any nearer and another two hours had passed before I was standing on the Silver Saddle, at the edge of the great *Firn* plateau. How often had I dreamed of this moment!

"My altimeter registered 24,275 feet. So far I had made pretty good time. I was not terribly affected by the height. I was having to take two breaths for each step. After another short rest I continued on my way. The *Firn* plateau went on for about two miles, at first rising gently but later inclining steeply up to the Fore-Summit; the difference in height amounted to about 1,500 feet.

"The *Firn* had been ploughed by the high winds into undulations three feet high. This meant a perpetual clambering up and down which greatly slowed down progress. At 25,000 feet I seemed to reach the limit of my capacity. Suddenly my body felt paralysed, my lungs could not expand, and every step demanded tremendous effort. My pauses for rest became more and more frequent, and I was acutely conscious of the thinness of the air.

"Otto did not seem to be faring any better. It was quite some time before I caught sight of his figure on the Silver Saddle advancing slowly, silhouetted against the skyline. I saw him stop and then sink down. Otto had given up. This in itself was more or less immaterial to me but with my tongue parched and my stomach rumbling I could not but think of the bacon in Otto's rucksack which was now lost to me.

"On the Silver Plateau the sun was scorching, the air was terribly dry and not a breath of wind was stirring. After each rest I had to force myself to get up and carry on, so great was the temptation to go on lying where I was. The steep rise to the Fore-Summit seemed to get not one whit nearer although I had now been pegging away for hours. My idea that I should reach the summit by midday was completely set at naught. I now directed my steps over to the extreme edge of the plateau where it dropped away into the southern face. I hoped that a cool breeze might be coming up from the south. But here too the air was perfectly still.

"The weight of my rucksack became intolerable and when at length I reached the foot of the rise to the Fore-Summit I took it off and left it behind. I reckoned on being back there before nightfall. I tied my anorak round my waist by the sleeves, having first stuffed the summit flag, my camera, spare gloves and drinking flask in the pockets. I also stowed away some Pervitin, and also Padutin in case of frost-bite, picked up my ice-axe and continued on my way.

"The going was now decidedly easier; the pauses became less frequent and, summoning all my will-power I tracked along below the Fore-Summit to the right in the direction of a declivity between the Fore-Summit and the Diamir depression. Once more the distance proved to be greater than it had appeared. I began to have doubts whether I should be able to keep going long enough, but in any case the Fore-Summit was within my grasp. It just missed being in the 26,000 feet class, but anyhow mine would be the first ascent. The Pervitin I was carrying gave me confidence; I felt I could rely on it in case of emergency. Just 300 feet below the Fore-Summit I set foot on the above-mentioned declivity."

Buhl had now reached the highest point hitherto attained. This was just about where Aschenbrenner and Schneider had stood when in 1934 they had climbed to within 150 feet of the Fore-Summit. It was also roughly the point where all possible ascent routes converged. Mummery in 1895 had aimed at the Bazhin Gap, and the route over the North Summit reconnoitred by Harrer, Aufschnaiter, and Lobenhoffer in 1939 would also run into the Rakhiot route at approximately this point. From this juncture Schneider had conjectured that the route to the summit continued by a descent to the snowfield below the Bazhin Gap and then up the summit shoulder either by a central rib on its north-eastern flank or by a traverse of the main east ridge from the Bazhin Gap. Buhl decided to traverse direct from the declivity towards the Bazhin Gap and the main east ridge, without descending to the snowfield below. His narrative continues:

"My traverse across the rocks to the Bazhin Gap took me over snow and ice, deeply terraced and strewn with boulders. It was already 2 p.m. A steep rocky ridge crowded with snow towers, vertical pitches of sharp-edged granite, badly exposed cornices and steep flanks of compressed snow, now lay between me and the shoulder. Assessing all these difficulties I remembered the Pervitin and took two tablets. I should need every ounce of energy and will-power I could muster. I knew that the drug would remain effective for only six to seven hours and that I must reach some resting place by that time.

"A steep ridge of compressed snow led to the foot of the rocks. At this point the mountain-face plunged in a vertical drop of several miles direct from the ridge. Once or twice I looked through crevices which had formed between the rock and the ice into the gaping void below. Never had I seen such an abyss.

"I laboured doggedly on from one rise to the next, treating every single pitch as an objective in itself. When once more the summit revealed itself far above me I simply could not realize that that was my ultimate objective. Finally I had to scale a thirty-foot overhang which obstructed the access to a *couloir* which in turn led farther up. At the end of the ridge, which was in parts very severe, a massive and upright gendarme still barred the way. It was impossible to climb over it so I had somehow to circumvent it. The rock was very brittle and called for extreme care. The last rise before the shoulder consisted of a very steep and long slope of hard compressed snow. This presented no special problem but it demanded great exertion. With my last reserves of energy I managed to work myself up the few feet which still separated me from the ridge. At 6 p.m. I stood at last on the shoulder at an altitude of about 26,250 feet.

"I felt that I had reached the limit of my endurance.

"Naturally, as a climber, I realized that I was now on the last lap to the summit. But it might just as well have been any other summit in my native Tyrol. This may seem incredible but that was how I felt. I was simply not conscious of the fact that I was at that moment at grips with our own Nanga Parbat, an untrodden peak of over 26,000 feet, the summit to which no less than seven expeditions had gone forth, the mountain which had claimed so many lives. . . .

"I took a last gulp of coca-tea which offered some fleeting refreshment. Then I traversed into the northern face. Steep and rough, a tumbled mass of boulders now led up to the summit, still about 300 feet above me. I now left the ski-sticks behind and—I could do it in no other way—scrambled up on all fours.* Suddenly I realized that I could go no higher. . . . I was on the summit.

"I was not, I must confess, at the time fully conscious of the significance of that moment, nor did I have any feeling of elation at my victory. I simply felt relieved to be on top and to know that all the sweat and toil of the ascent were behind me.

"It was about 7 p.m. I at once took the small Tyrolese pennant from the pocket of my anorak, tied it to my ice-axe, took a photograph and tucked the pennant away again to take back to my club. Then I got out the flag of the country whose guests we were, **Pakistan**, fastened it to my ice-axe, changed films and took some more photographs—down towards Rakhiot Peak, towards the Fore-Summit, the Plateau and the Silver Saddle. My eye scanned the three mile drop into the Rupal valley where the setting sun was throwing the mighty shadow of the mountain on which I stood far out into the land. I looked all round me, eastward into the Himalaya, northward to the Karakoram with the Pamirs and the Hindukush adjoining further west. To the south I could see over and beyond many 16,000 feet peaks.

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* Schneider had given warning that the climb to the shoulder, while quite within the bounds of possibility, might well prove to be technically the most difficult section of the whole ascent, but had declared that the stretch from the shoulder to the summit appeared to be a broad and easy rise negotiable by anything from "a handcart to a small motor-car". The experience of Hillary and Tensing on Everest was the reverse of Buhl's. The summit was presumed to be rocky but they found it was a smooth, gentle, snow-rise.

"It was 7.10 p.m. when I left the summit pyramid. The sun was just disappearing on the horizon, and although the rocks still held some of the heat of the day, it immediately became very cold. The ridge seemed to me to be too difficult and dangerous for the purposes of descent, so I thought of trying to get down across the *Firn* flank facing the Diamir side. Unaccountably I had left my ice-axe on the summit so I had only the two ski-sticks with which to keep my balance. This carelessness might well have proved to be my undoing, for I was standing right in the middle of the traverse when suddenly my right crampon slipped off my boot. I just managed to grab it in time but the strap went overboard.

"I was left like a stork standing on the smooth hard surface on one crampon, supporting myself on the two ski-sticks and without an idea as to how I should extricate myself. With extreme caution I finally succeeded in reaching some rocky ground.

"When I had dropped about 450 feet from the summit, night suddenly closed in on me. Some distance away I could just see the outline of a large rock and I now groped my way towards it. Supporting my body against the mountainside which inclined at an angle of about 50°, I spent the night standing on this rock.

"I thought longingly of my bivouak equipment which was waiting for me in my rucksack at the foot of the Fore-Summit. I only had my thin pullover on; my heavy one, the tent-sack and my other spare clothing were all in the rucksack.

"Finally, as Karl had been at great pains to impress on me that I should do in case of an emergency bivouak, I took a few pills of Padutin.

"It was 9 p.m. when the darkness forced me to bivouak against the mountain, standing on that unsteady chunk of rock. To the west the last light of day was gradually being extinguished. My rest did me good, even if I was standing all the time. The hours passed surprisingly quickly. I dozed, nodding a little now and again, then jerking myself upright once more. Then a cold shiver would run through me. But it was all quite bearable. The only trouble was that my feet gradually lost all feeling, for I could not keep them moving sufficiently. It was not until nearly 2 a.m. that the moon appeared. Its silvery crescent hung just above the summit, lighting up miraculously the slopes of the North and Fore-Summits below me and casting its light right over to the Bazhin Gap. But I was not in its floodlit path; the flank remained in shadow. So I had to go on waiting until dawn should break.

"As the morning of 4th July approached it became increasingly cold. On the eastern horizon a pale streak showed in the sky. But it was still too dark for climbing and it was not until 4 a.m. that I was able to continue my descent. I had no feeling whatsoever in my feet, my boots were frozen stiff and the rubber soles were glazed with ice. All this called for extreme care. Every step had to be well considered even where the gradient was not particularly steep; the smallest error of judgment could have been fatal.

"If I did only one slight slip in the snow this took so much out of me that I needed minutes to collect myself again. After overcoming a difficult pitch which once again left me completely out of breath I stood at last on the steep iron-hard snowfield which led up to the Bazhin Gap. At around midday I eventually reached the rocks at the Diamir depression. As these offered but very slight hand-holds I took off both pairs of gloves and stuffed them in my pockets. When later I went to put them on again I found that one pair was missing. I have no idea what could have happened to them.

"Throughout this day I had the feeling that I was not alone, that someone was accompanying me. Many times I found myself in the act of turning round to address my companion, and when I was looking for my gloves he told me that I had lost them. It was only when I looked round that I realized that I was alone.

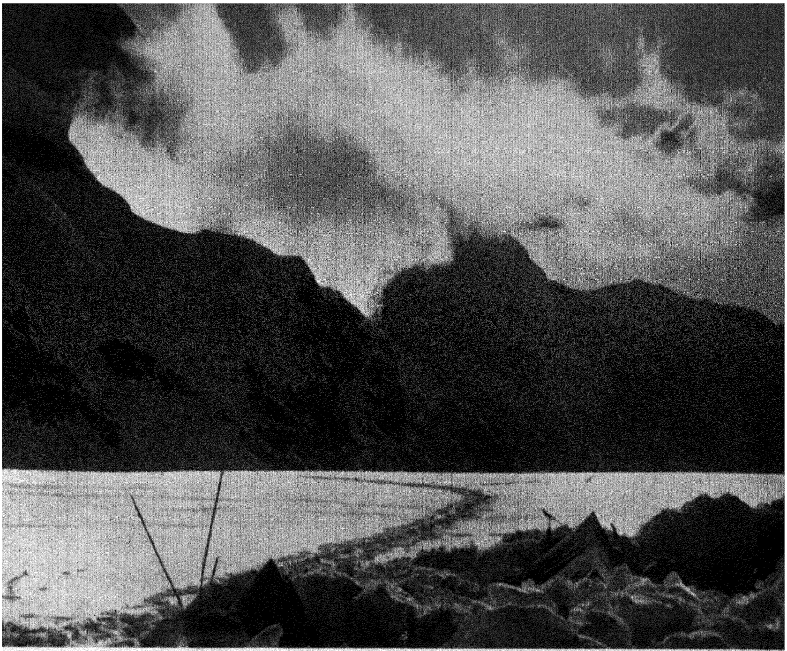
"The sun beat down without mercy. I took a rest and fell asleep for a short time. I awoke feeling ravenously hungry and with a raging thirst. I was so absolutely parched that I was obsessed with the thought of drinking. Now and again I heard voices above me and hoped it might be Hans or Walter coming to meet me with a flask of tea. But no one came. I continued to drag myself on with what help I could get from the ski-sticks, to the Diamir depression which lay about 100 feet up. It seemed quite incredible now, that only the day before I had been able to climb to the summit.

"At last I reached the Diamir depression. Before me lay once more the vast sweep of the Silver Plateau. I could no longer swallow nor speak. Blood-stained slaver oozed from my mouth. I longed to get at my rucksack, for hunger was torturing me no less than thirst. I stumbled about among the hard furrows. It was some time before I could locate the rucksack, then finally I fell down beside it. I could not swallow dry food, but I made myself a wonderfully refreshing concoction of Dextro-energen and snow and after a prolonged rest began to feel better again. Far away on the Silver Saddle I saw two specks. Oh, the joy of it! Someone was coming! I heard voices too, calling my name.

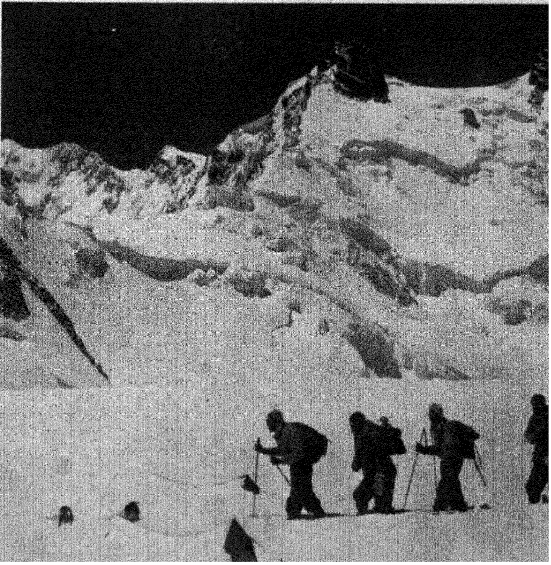
"But what was wrong? The two specks remained static. There was no movement in them. Then I realized that they were rocks. How bitter, how painful was this disillusion! My rests became more and more frequent, the pauses ever longer. I would struggle along for twenty or thirty yards then once more would I be fettered and held in total collapse. Two to three steps demanded ten rapid gasps for breath, then twenty, then still more, until eventually I could go on no longer. Then would follow another long rest, and then the agony would start all over again.

"In this fashion I reached the lowest point of the plateau. I was on the very brink of despair as I floundered among the petrified waves of this vast expanse of fluted *Firn*.

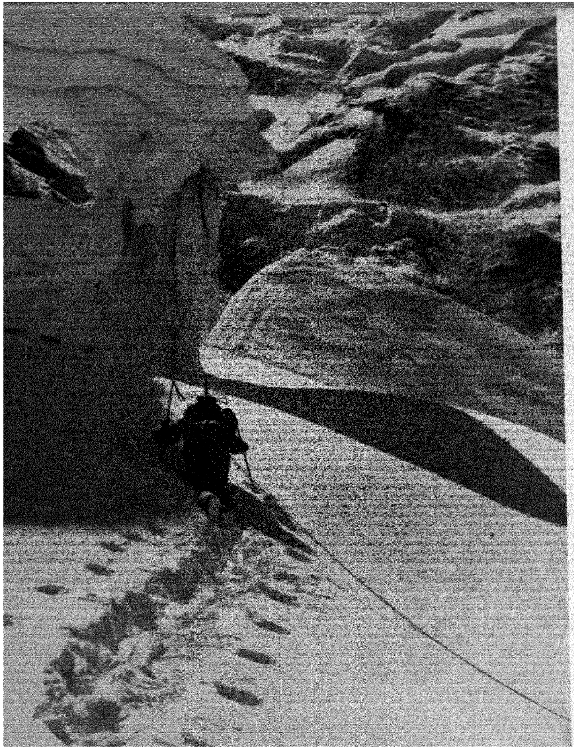
"The counter-gradient to the Silver Saddle seemed endless. I now resorted once more to Pervitin. Whatever reserves of energy were left must now be mobilized, otherwise I should be finished.



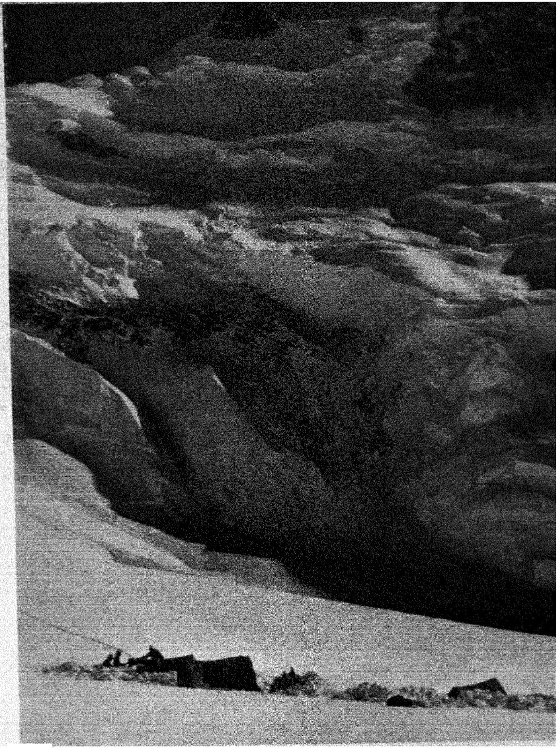
Camp III on the highest plateau of the Rakhiot Firn (20,000 feet)



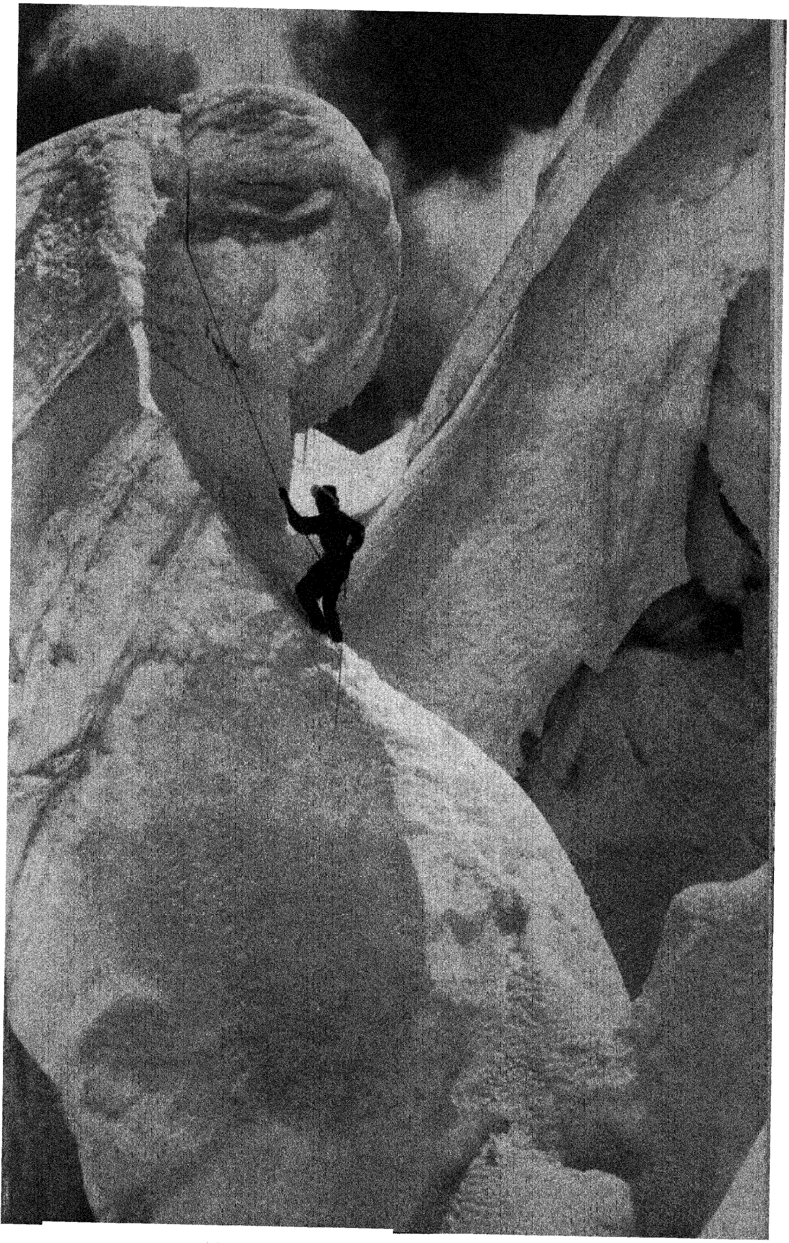
On the eve of the final assault. Camp IV almost buried in new snow; the Silver Saddle in the background



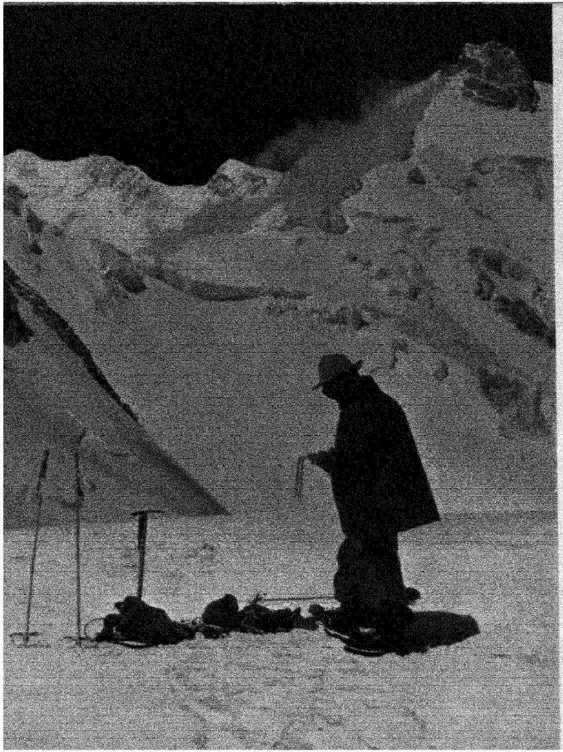
Laborious trail-making on the way up to Camp III



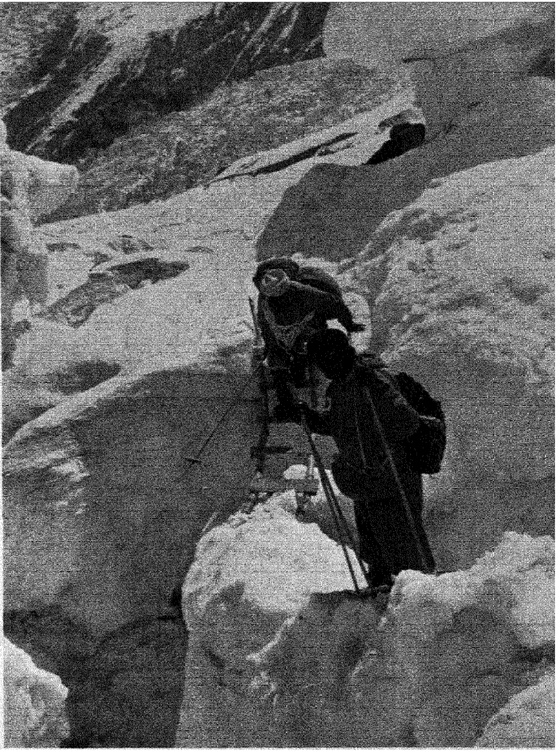
Camp III seen against the Silver Saddle



Séracs in the Rakhiot Glacier often called for meticulous ice-craft. There was no way round this tower of ice and it eventually had to be negotiated by means of a fixed rope. A rope ladder was later put in position for the heavily laden Hunza porters



Temperature check at Camp IV



Bridging a crevasse in the lower Rakhiot Ice-fall

"At 5.30 p.m. I stood at last on the Silver Saddle and, looking down, saw two men standing near the Moor's Head. The sight of them gave me fresh impetus and as though buoyed up anew by some secret force I went ahead with greater ease."

As Buhl staggered and swayed down the last few feet of the ridge he fell into the arms of Hans Ertl who had gone up to meet him. He looked aged by twenty years. His face, desiccated and deeply lined, bore the imprint of intolerable suffering. From his lips fell the words: "Yesterday was the finest day of my life." Although torn with grief at the sight of his friend's agony, Ertl filmed Buhl's last steps to the tent and so put on permanent record the final moments of this unique adventure.

CHAPTER VII

The Return

WHEN Walter Frauenberger was convinced that it was Buhl he had seen on the Silver Saddle, he roared the good news down to Hans Ertl. Otto Kempter, who was just crossing the Rakhiot West Flank with three porters, was also informed with a shout, and he let forth a whoop of delight. Frauenberger's diary continues:

"The feelings of relief and gladness which at that moment filled the three of us—indeed the whole six of us, for the porters visibly shared our happiness—were indescribable. Emotions of joy and thankfulness overwhelmed us. I was laughing and crying at the same time as I hurried to finish my chiselling, constantly glancing upwards. Hermann was coming! I felt as if my own child had been snatched from the very jaws of death. Whether he had reached the summit or not was at that moment a matter of indifference. That he was alive, that he was to be restored to our midst, that was all that we could ask.

"So as to give Hans and Hermann a chance of a good night's rest in Camp V, where there were only two sleeping-bags, I packed my rucksack and, as the daylight was already beginning to fail, decided to start on my way down to Camp IV even before Hermann arrived. I asked Hans to greet Hermann for me and to let me know, by calling out to me, how he had fared.

"I stood another moment in the gathering dusk at the Moor's Head next to the newly erected memorial tablet. I turned round once again and witnessed the reunion between Buhl and Ertl. It was shortly after seven. I watched them, deeply moved.

"I heard the two of them talking while Hans led Hermann to the tent, and then Hans shouted up something which I did not immediately grasp. From where I was standing Hermann appeared to be quite fresh, which rather surprised me. Hans shouted again and only then did I understand—Hermann Buhl had come from the summit . . . victory was ours! Once more I felt my heart beat furiously and my eyes filled with tears. I turned and read again the names inscribed on the tablet which we had placed on the Moor's Head: Willy Merkl, Willo Welzenbach and Uli Wieland. I communed with the dead. After an interval of twenty years their sacred trust had at last been fulfilled.

"As darkness crept up from the Rupal valley, Hans discovered me still standing at the Moor's Head not quite in possession of myself. He suggested I should come back, we would manage somehow. I ran down as quickly as my legs would carry me. Hermann looked all in. Gazing deeply into his weary, hollow eyes, I embraced him.

"Hans immediately got down to making hot drinks and administering oxygen. Hermann talked incessantly. It appeared that he had taken three Pervitin tablets while still on the *Firn* plateau above the Silver Saddle. This had enabled him to come down the ridge safely and comparatively quickly, but also accounted for his highly over wrought state. There was something quite uncanny about his behaviour.

"It so happened that a few minutes after Hermann Buhl's return another walkie-talkie link-up was due and we were able to transmit the best news of the whole expedition. Buhl himself said a few words to Karl, but he could speak only with the greatest difficulty as his throat had been painfully affected by the terrible hunger and thirst he had endured.

"I got busy with his two frost-bitten toes which I massaged with ointment until late into the night, and finally Hermann fell into a sleep of total exhaustion. He lay between Hans and me—we ourselves spent the night wide awake and freezing with cold and yet indescribably elated. The summit had fallen, its victor was safely in our midst and on the morrow we should be leaving this world of snow and ice and making our way down to the valley.

"On waking, Buhl was still very weak and had not completely emerged from his delirium, but we managed in the early morning to make the descent to Camp IV.

"Meanwhile Otto Kempter had come up to Camp V again with two porters to collect the most valuable items of equipment, the walkie-talkie instrument and the oxygen apparatus. The storm tent on the East Arête was abandoned, an offering to the gods of Nanga Parbat who for once had been merciful. In the afternoon we all made our way down to Camp III together."

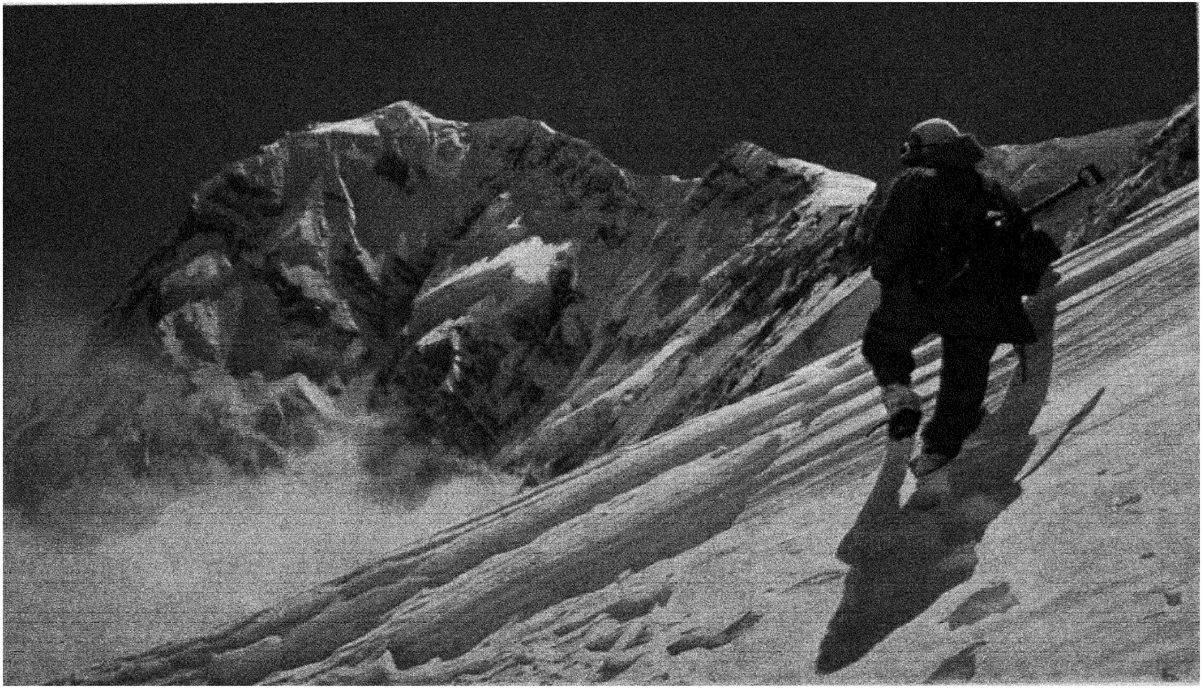
At Base Camp everyone was in the greatest good spirits. The short bulletin which Hermann Buhl himself had transmitted immediately after his return on the evening of 4th July had brought immense relief after those days of unbearable suspense.

We talked and talked until late into the night, discussing the many factors which had so fortuitously combined to make Buhl's lone exploit possible. That a climber in bivouac should be granted an almost windless night at an altitude of close on 26,000 feet was something that would probably never be repeated in the history of Himalayan mountaineering. All agreed with Albert Bitterling, our "weather wizard", when he emphasized the almost miraculous luck which had given us the extended spell of good weather. Buhl's solo-climb and his bivouac without proper equipment had been entirely dependent upon these unusual conditions. But all the luck in the world could not detract from his superhuman achievement.

At about the same hour on the evening of 5th July at which the successful assault team came down to Camp III, the evacuation squad, consisting of Hermann Köllensperger, Fritz Aumann and a few porters, reached Camp II from below.

Kuno Rainer, whose illness had kept him with us at Base Camp all this time, had that day just finished making the carrying frame on which he himself was to be conveyed. He had insisted on knocking it together himself.

On 6th July the descending assault team and the ascending evacuation squad met between Camps II and III. This was an occasion for great rejoicing, after which both teams continued on their separate ways.



Hermann Buhl on the East Arête of Nanga Parbat. (1) The Summit; (2) Fore-Summit

Although Otto Kempter had evacuated Camp V on 5th July, and the evacuation squad had no need to go beyond Camp IV, Fritz Aumann went up to the Moor's Head again two days later on his own. In the late evening he stood at the graves of Willy Merkl and Gay-Lay and in quiet contemplation remembered the dead in whose name the Expedition of 1953 had been launched and brought to a victorious conclusion.

The assault team arrived back in Base Camp on 7th July—Hermann Buhl, Walter Frauenberger, Hans Ertl, Otto Kempter and the three brave porters who beyond all expectation had ventured several times across the exposed Rakhiot Ice-wall. After their long stay up in the ice region they were all obviously overcome as they stood once more among the luxuriant green foothills which surrounded the Base Camp and were welcomed with garlands of flowers.

I at once attended to Hermann Buhl's frost-bitten toes. I had been informed of this condition within five minutes of Buhl's arrival at Camp V and had offered to come up to Camp III on the following day. But Hermann Buhl had been of the opinion when I spoke to him over the walkie-talkie that treatment was not urgently necessary and that he could descend without difficulty. Hans Ertl had also confirmed at the same time on the evening of 4th July that in his view the frost-bites were of a relatively minor degree. This unfortunately was not correct.

The two frost-bitten toes, namely the first and second of the right foot, already showed a clear line of demarcation when I examined them on 7th July shortly after the arrival of the assault team in Base Camp. I could even at that time predict that Hermann Buhl would have to resign himself to the loss of half of each of these two toes. The injection of novocaine was no longer indicated. By numbing, that is to say, by putting out of action the vascular nerves in the right leg it would have been possible shortly after the injury occurred to counteract the reactive contractions of the blood vessels and to improve thereby the blood supply to the injured tissues, but this was useless unless done within 24 hours of the contraction of the frost-bite. Even if I had been on the spot in Camp V on the evening of 4th July when Buhl returned it might not have been possible to save his toes. The danger of putting too great a strain on his circulation, with his body excessively weakened by altitude debility, would probably have prevented me from taking any immediate action.

I advised Hermann Buhl to hurry ahead with me to Gilgit so that he could get hospital treatment there. My advice was not due to a lack of medical supplies in the camp. When the assault team arrived on 7th July, Albert Bitterling and Kuno Rainer, still far from well, were hard at it getting loads ready for final dispatch, and a few Tato men were already standing by. But nothing so far had actually been removed and it was still possible for me to get to the medical supplies and equipment if I needed them.

On 14th July the good weather broke at last. The monsoon, which in spite of its initial caprices had spared us during the decisive days, now broke with full force. When we struck our tents the rain came down in torrents and eased up only when the long file of porters was moving down towards the swampy Fairy Meadow. In Tato we pitched our tents for the last time. The following day we descended the stony waste of the Buldar Ridge to the Indus valley.

Hermann Buhl had to be carried all this long way. Kuno Rainer, suffering severe pain in his leg and supported on two ski-sticks, slowly dragged himself down the steep stony path. Nanga Parbat had disappeared from sight. A thick bank of cloud enveloped the entire massif, and we were reminded of what the porters had said: that the mountain had only been sleeping during our assault. The prophecy of the local people in Gilgit had, strangely enough, been along the same lines: "The mountain god will sleep this time. You will have good fortune."

When we came to the Indus at the Rakhiot Bridge, I at once made use of the telephone connection which had been installed there for our benefit and ordered six jeeps. We of the first group sat down and rested at the Rakhiot Bridge while we awaited the arrival of the vehicles. It was again unbearably hot down here in the Indus valley, and Aumann, Bitterling, Kempter, Köllensperger, Rainer and I were tempted once or twice to take a quick dip in the Indus, but Tato men were constantly arriving with their loads and there was work to be done.

We should never have thought it possible that we should have further trouble with the porters at this late stage. But they did not spare us. The Tato men rebelled because I had agreed with the two Lambadars to pay to them in Talichi the whole amount due to their men in one lump sum. The sole reason for this was that I had with me only treasury notes of large denomination. The porters were probably afraid that they might not get their full wages from their superiors and insisted therefore that every single one be paid personally at the Rakhiot Bridge. Rhabar Hassan, who defended our original agreement, only just escaped being stoned. To appease the porters I dispatched our financial expert, Otto Kempter, to the Rakhiot Bridge to pay them out before nightfall. He dispensed the bank notes as best he could and left it to them to settle up with each other.

Our drive from Talichi to Gilgit was a great surprise to us and gave us a foretaste of what was still in store. Even here in this remote secluded mountain valley it resembled a triumphal progress. At the edge of every hamlet or settlement whose existence we had hardly been aware of on our way out, the village band was now posted, and the whole population had turned out to greet us.

Sitting in and on our jeeps we drove slowly and in sheer amazement through wildly cheering crowds. "Zindabad Germany"—was the universal greeting. Banners bearing the words "Welcome Germans" and even "*Herzlichst willkommen*" were stretched across our path. Shortly before Gilgit a thunder storm somewhat damped the general enthusiasm, but when we entered the town itself—which had acquired such great significance for us—the fun started in earnest. Waves of jubilation engulfed us. All the dignitaries of the town, the army and the Hunza state were present as the Political Agent, our good friend from the outset, decorated us with fragrant garlands of roses. Here too before and after the official reception the bands played and the people cheered "Zindabad".

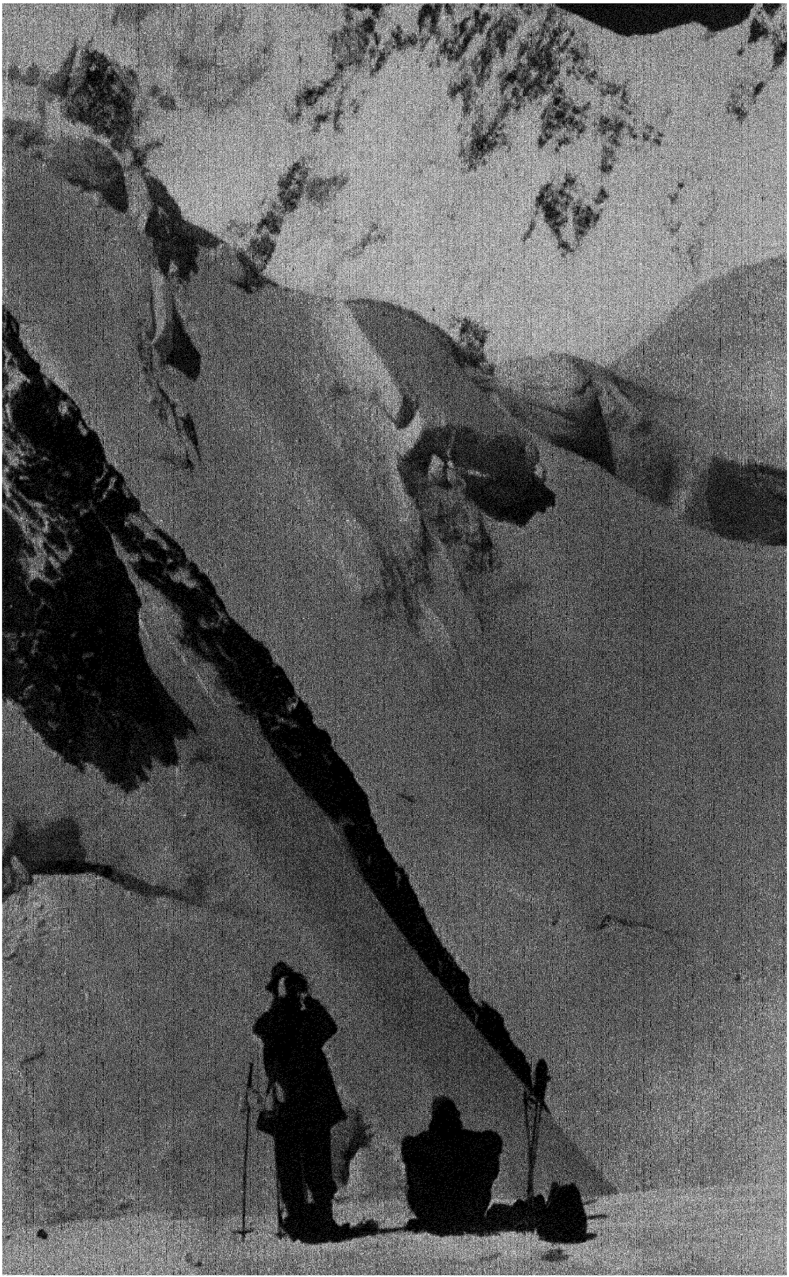
The honest delight and pride of my young colleague at the Gilgit Hospital that I, a man of his own profession, should have led the victorious Nanga Parbat Expedition, were, I thought, most charming. I at once entrusted to him the further medical care of the hero of the day, Hermann Buhl with, of course, the full consent of the patient and his comrades.

During the next few days we could all relax a little. Tea parties were arranged in our honour. In the garden of the Political Agent's house a dais was erected and many congratulatory speeches were made. Along with all these official occasions, we were occupied in paying off our Hunza porters, with many of whom we were now on close friendly terms. It was natural that the closest bond had been forged with those four men who had at the crucial period several times covered the exposed route to Camp V. We always had them included in any celebrations and honours which were arranged for the victorious expedition.

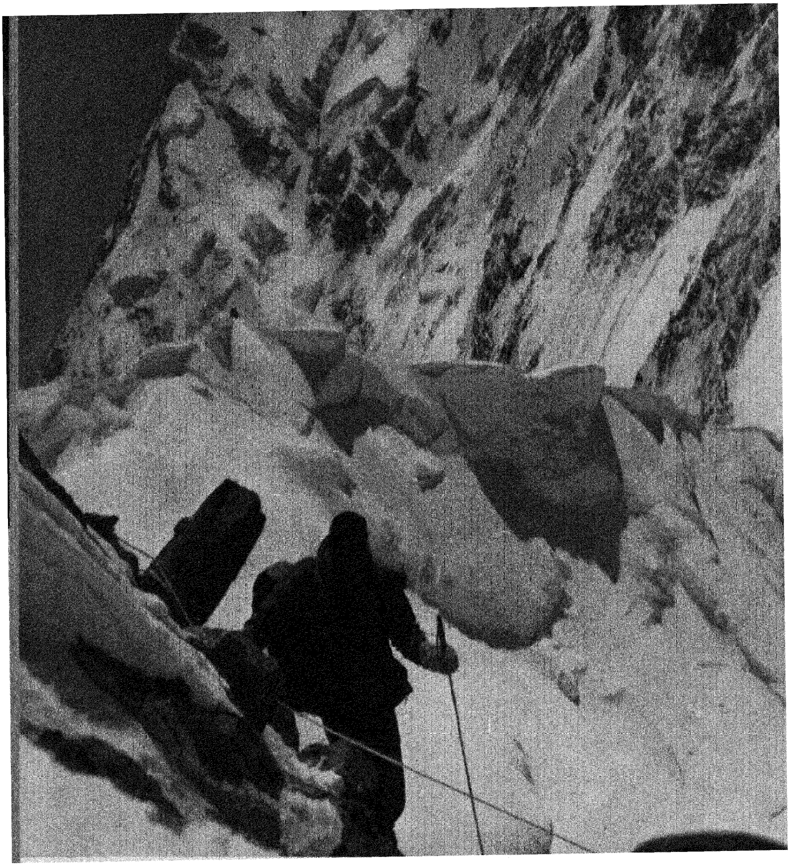
During this time Hermann Buhl and I were the personal guests of the Political Agent and occupied a room in his house. We had many a long talk together during that period of close contact and I felt that our friendship was firmly established. Little did I know that it was not to last.

We all of us flew again from Gilgit to Rawalpindi. The flight was as impressive as it had been two months before. We took our leave of Nanga Parbat and saluted that dome of ice, Chogori. The German colony in Lahore gave us a specially warm welcome. I made arrangements for Hermann Buhl to travel on by air so that he would not have to endure the long train journey to Karachi.

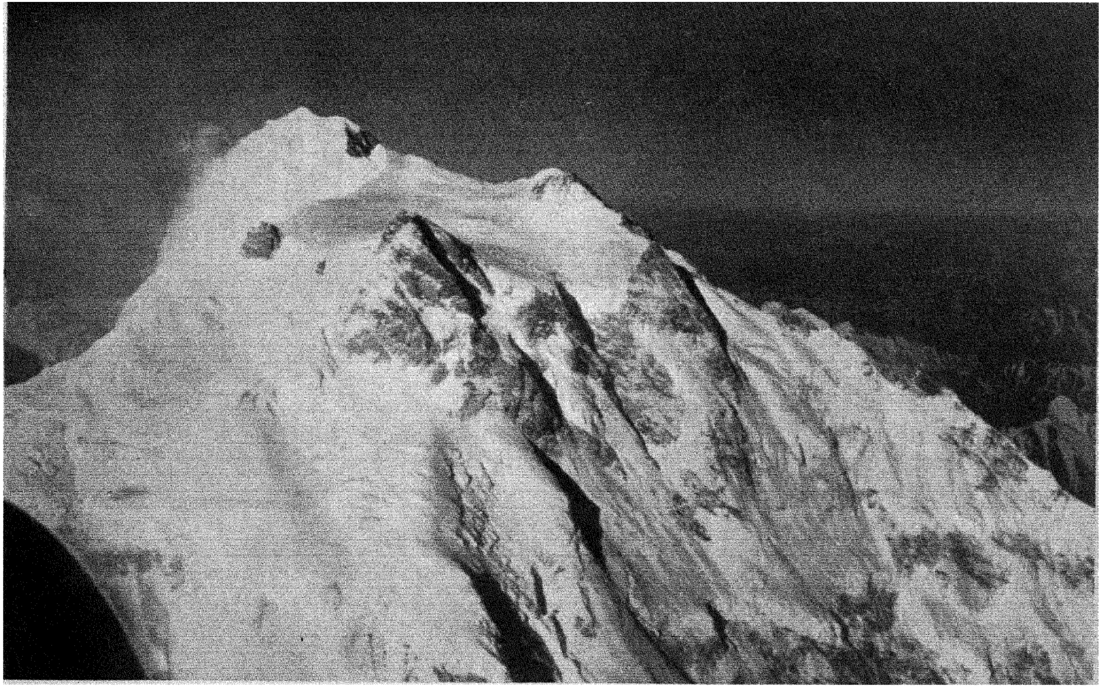
In Karachi the team was met by a cheering crowd, and on the evening of our arrival there the Pakistani Cultural Association presented me with a gold ring to commemorate the occasion. Representatives of the Government of Pakistan and of the German Embassy also proffered their hearty congratulations. In the course of the days which followed, during which we had to make arrangements for our return journey, a very special honour was conferred on the expedition. At a ceremony held in the garden of the President's residence, each member of



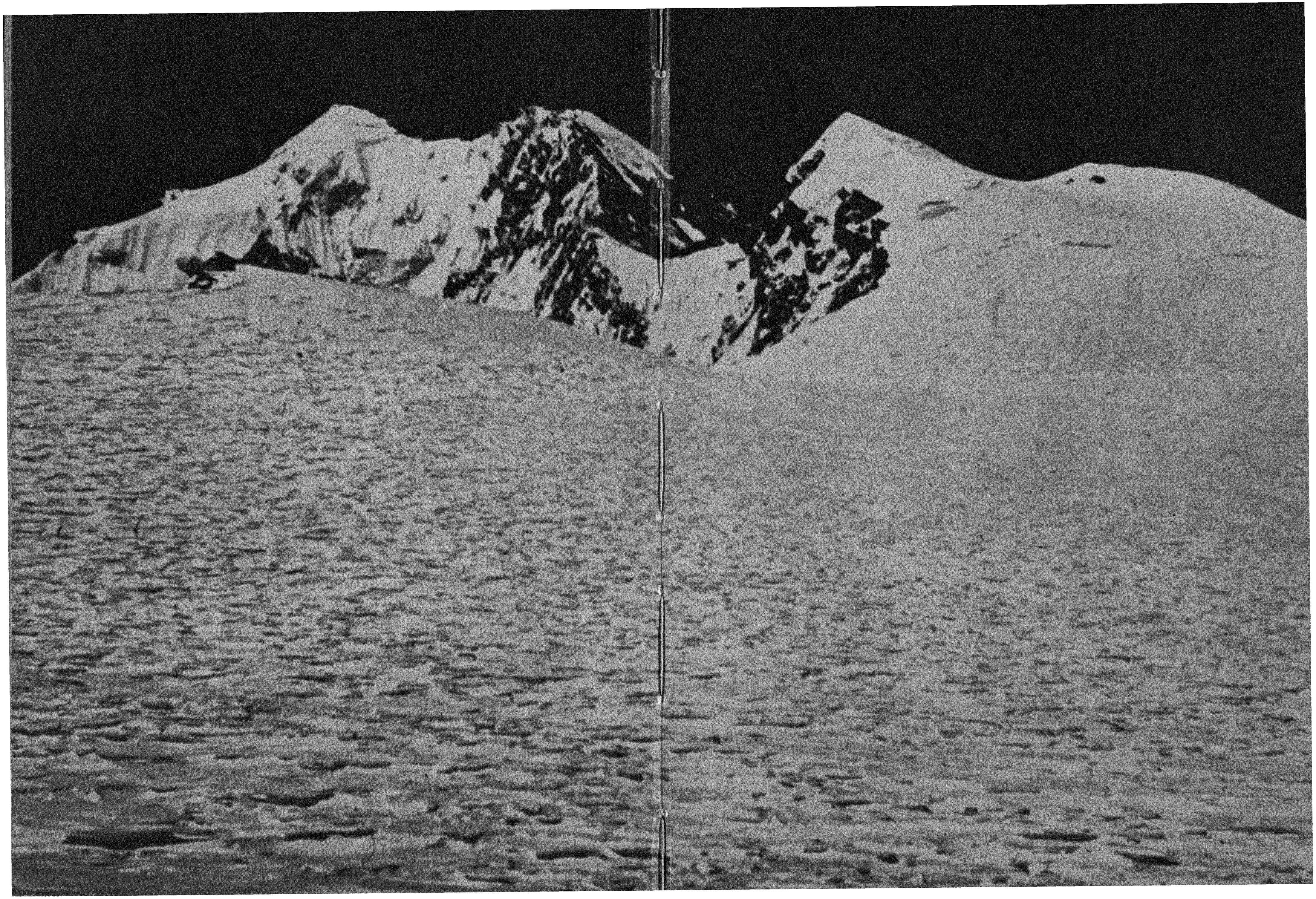
South wall of the summit massif from Camp IV, looking across the Rakhiot North Spur into the *Mulde*



The traverse of the Rakhiot West Flank. The summit massif and the precipitous south face into the Rupal Valley


Summit
Bazhin Gap
Diamir Depression
Silver Saddle

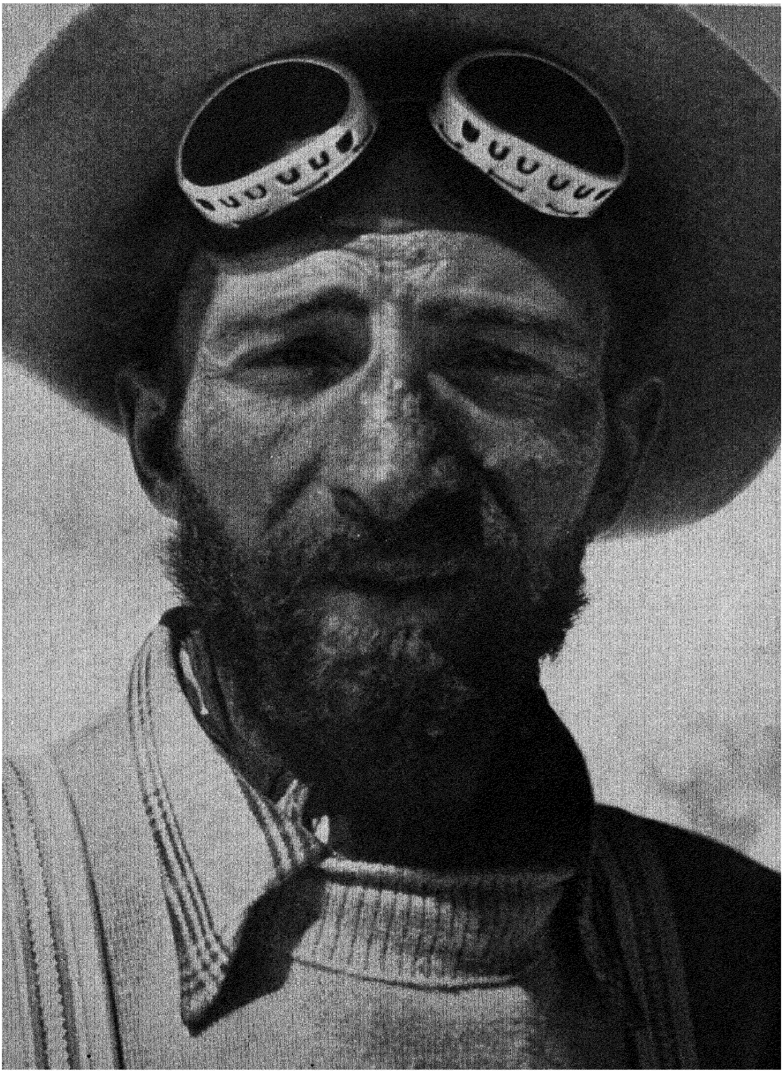
Silver Saddle, Silver Plateau, and summit of Nanga Parbat from the east, showing the entire ascent route
(*By courtesy of the Alpine Club and The Deutsche Himalaja Stiftung, Munich*)



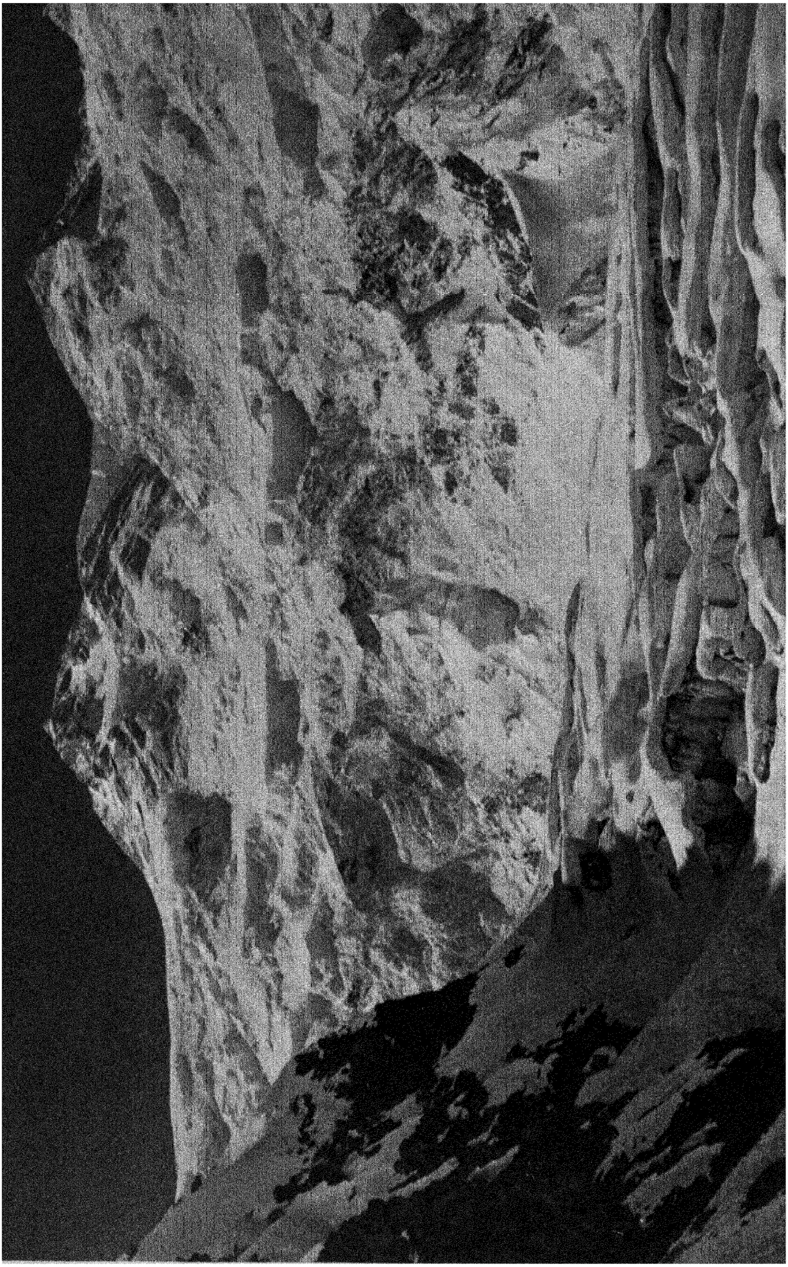
Main summit
Should
Bazhin Gap
Fore-summit

Silver Plateau about 25,500 feet

The jubilation on Buhl's return from the summit



Buhl photographed on his return from his successful assault on the summit. His face shows the imprint of his sufferings



The precipitous north-east flank of Nanga Parbat, Silver Crag left, North Summit right, the edge of the Silver Plateau in the centre the expedition was invested by the President of Pakistan with a medal specially struck for the occasion. The investiture took place beneath a magnificent canopy and in the presence of all the heads of the provincial governments and the Ministers of State.

After a few days of relaxation in our hotel which was situated right on the sea front, we decided to fly home together. Otto Kempter, after long deliberation and much obscure calculation, was as our treasurer able to sanction this decision. However, as the tourist season was at its height it was not possible for us to travel as a team. The 'planes flying in from India had at best only one or two seats vacant. For a start we were able to get two tickets for the KLM 'plane leaving on Thursday, 22nd July. One of these had actually been booked for Albert Bitterling but he stood down in favour of Hermann Buhl and so the two of us (Hermann and I) were the first to be off.

In Munich a wonderful welcome awaited us. Our patron, the Chief Burgomaster, Thomas Wimmer, took the trouble to drive out to the airport on three consecutive days to welcome the various members of the team as they came in, with flowers and giant tankards of Munich Hofbrau-beer. At a later ceremony we all received from Herr Wimmer a commemorative plaque of the City of Munich in recognition of our achievement.

A few weeks later a singular honour was conferred on the expedition. The Geographical Society of Berlin presented the Willy Merkl Memorial Expedition with the Ferdinand von Richthofen Gold Medal in honour of the first ascent of Nanga Parbat on 3rd July, 1953, and in grateful recognition of the praiseworthy mountaineering achievements and outstanding scientific accomplishments of *previous* German expeditions to Nanga Parbat.

The Society justified the high award by expressing the conviction that Hermann Buhl's magnificent and courageous solo climb to the summit was made possible only by the support and co-operation of every other man in the team.

CHAPTER VIII

The Aftermath

EXTRACT FROM the dispatch of 6th August, 1953, from the Special Correspondent of the *Manchester Guardian* in Berlin:

> "There has . . . been much adverse comment in the press on the cantankerous way in which the climbers (of the Nanga Parbat Expedition) have behaved since returning from their bold adventure. . . . Conflicting and unfriendly reports have led people to believe that the spirit of the climbers left something to be desired. So far, however, the reports have been contradictory. . . ."

Although this book is appearing (i.e., in its original German version) within a few months of the expedition's return, and is in many quarters expected to provide an answer to certain publicly made criticisms, I will, nevertheless, make only a few comments.

On the eve of our departure Sven Hedin wrote from Stockholm to a friend in Munich this letter which may well have been one of his last:

> "Many thanks for your kind letter concerning the expedition to Nanga Parbat. Unfortunately it often happens that such disagreements arise and I too had to contend with them on my own expeditions. It came, however, as a surprise to me to hear of such negative interferences on the part of certain gentlemen who are, after all, quite well-known.
>
> "The most important thing in any common undertaking is comradeship, and anyone who declines to identify himself with the team spirit automatically excludes himself.

"You may assure the gentlemen of the expedition that my warmest good wishes go with them and that I send them every blessing for their journey. They will, I am sure, succeed in conquering the mountain and I shall be with them in spirit on their way.

"So please tell the leader of the expedition, Dr. Herrligkoffer, that I am still prepared, as I wrote some months ago, to act as President of the Council.

"Though it is nowadays much easier to reach the objective of such an enterprise than it was at the time of my first expeditions in 1893 and 1895, in the hour of decision man can still depend only on himself. For this critical hour I wish the expedition wisdom and discretion but also the will to attack.

"With kindest regards to you and with affectionate good wishes to every member of the expedition,

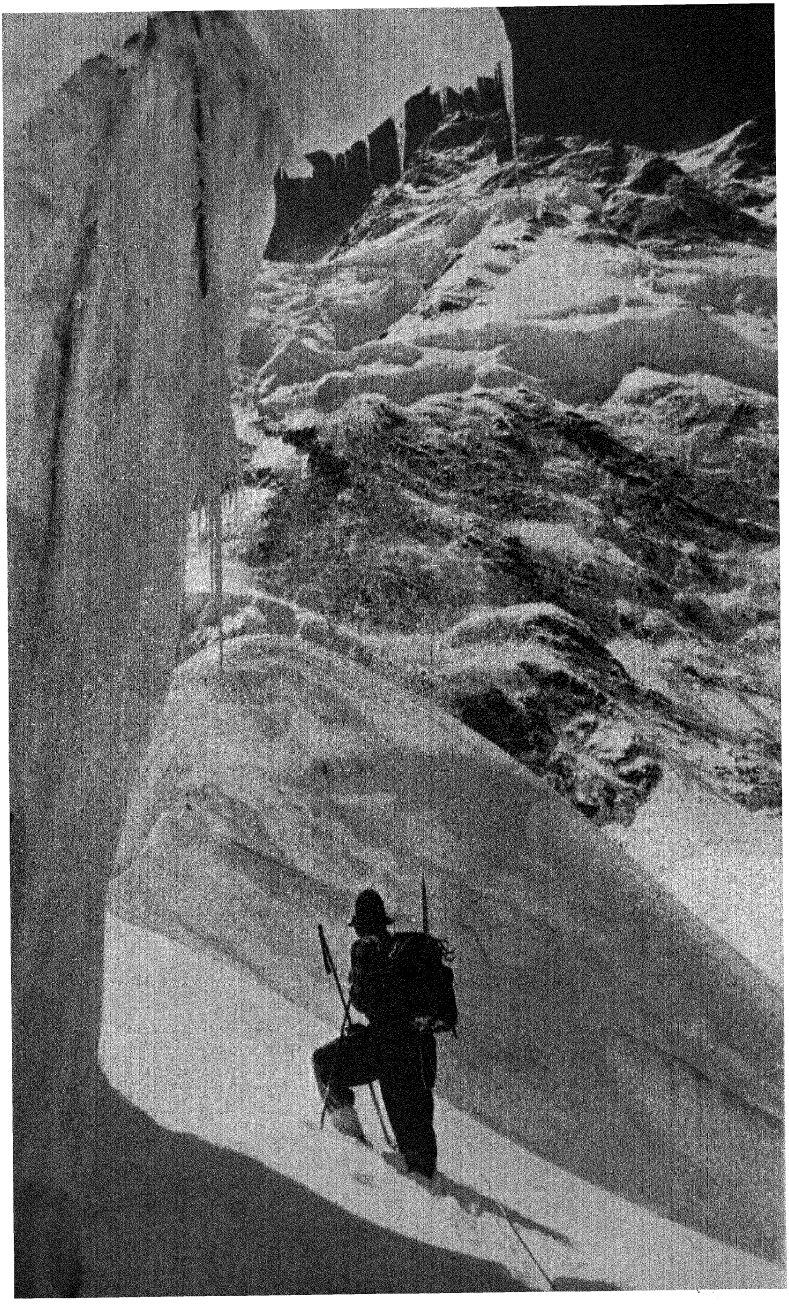
"Yours sincerely,
"(*Signed*) SVEN HEDIN"

When our team left Munich on 17th April, 1953, every member of it was determined to forget the difficulties and disappointments which had preceded our departure. I, for one, who had also been the object of many attacks, was so thoroughly relieved that we were at last on our way, that I firmly resolved to dwell no more on the unpalatable events of the past few months. My comrades, particularly the younger ones, were deeply conscious of being privileged to take part in the first post-war German expedition and were thrilled at the prospect of embarking on the greatest adventure of their lives. Every man co-operated well while exposed to the dangers of the quest and the rigours of the alien environment, but the team had hardly reassembled in Base Camp when the spirit of disunity, seemingly inseparable from human nature, was once more abroad. The pleasure which we might all so justly have felt, was ruined. Of the nine members of the team, six have remained my friends.

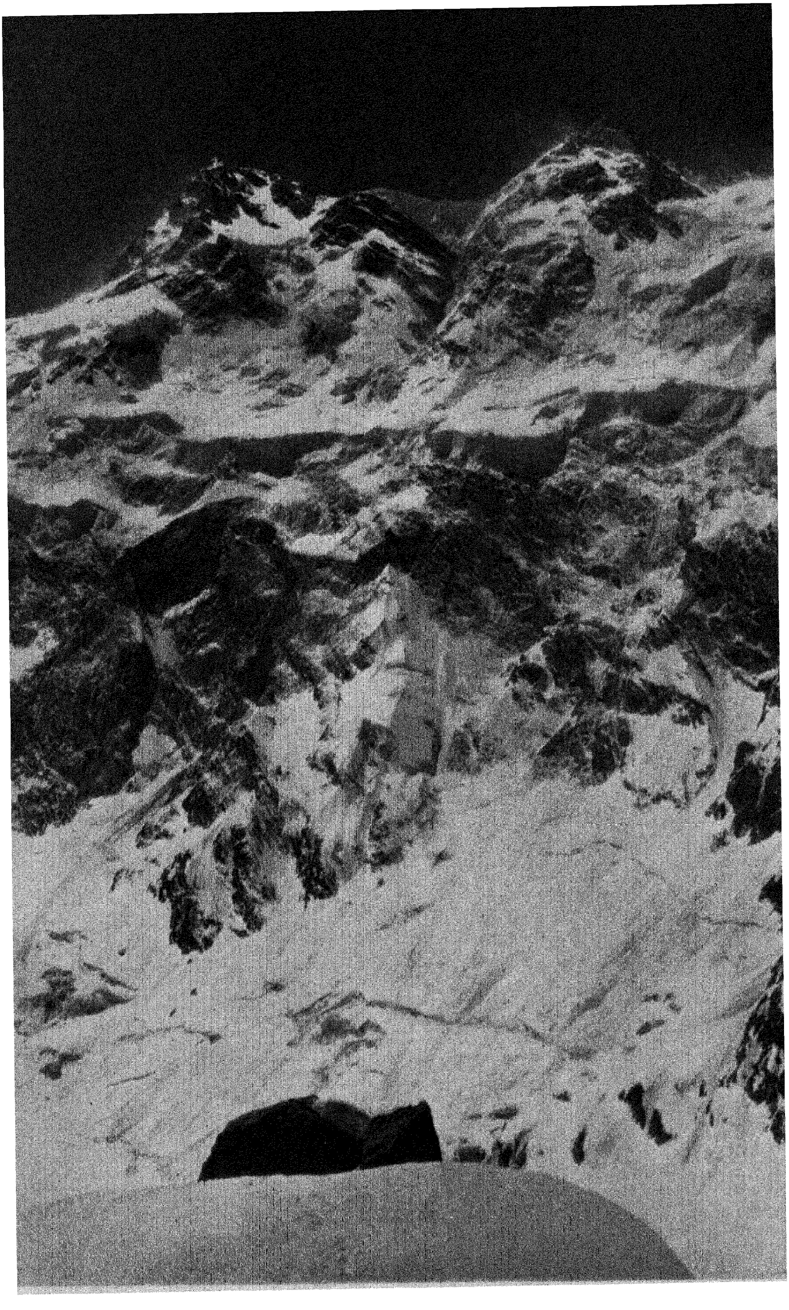
While still on our return journey, I called all the comrades together to exhort, or rather to ask them to keep the discipline of the team intact. It was of no avail. After our arrival in Munich I arranged meetings at my home and with our Patron, the Chief Burgomaster. They have achieved only a semblance of peace.

I have never answered in public the attempts which have, with the assistance of the press, been made to discredit me, as I had no wish to damage the prestige of the expedition and of the German climbers by engaging in a public dispute. In a private letter, dated 19th August, 1953, circulated to all interested parties, I merely made all the relevant facts known.

In a few years' time anyone who is interested in mountaineering will be concerned only with the fact of the German victory on Nanga Parbat in 1953 and will contemplate with respect the amazing solo climb of Hermann Buhl which, in its daring conception and successful outcome, will probably remain unique. No one will care to recall the unedifying dispute which before and after the enterprise embroiled many German climbers and beyond them, the German public as a whole. All this will have been forgotten. And those who do not forget will be wise enough tolerantly to regard it all as but another manifestation of the frailty and imperfection of human nature.



View towards the north-east summit of Nanga Parbat (Silver Crag)



The north-east flank of Nanga Parbat

APPENDICES

APPENDIX (A)

Equipment

THE MOST important factor in the equipment of any Himalayan expedition is the provision of adequate protection against cold. For advice on this question we relied on Peter Aschenbrenner as veteran of the 1932 and 1934 expeditions, and he placed all of his great knowledge and experience unreservedly at our disposal.

Unfortunately there was little time or opportunity to try out our equipment. Only the most important items, such as tents, boots, clothing and cooking apparatus could be put to the test in high mountain conditions. All other articles, for the greater part of which we were indebted to the generosity of German industry, came in only a few weeks before our departure, in certain cases literally at the eleventh hour. Some of the firms subscribing were quite understandably put off by the adverse press, and this greatly hampered our preparations.

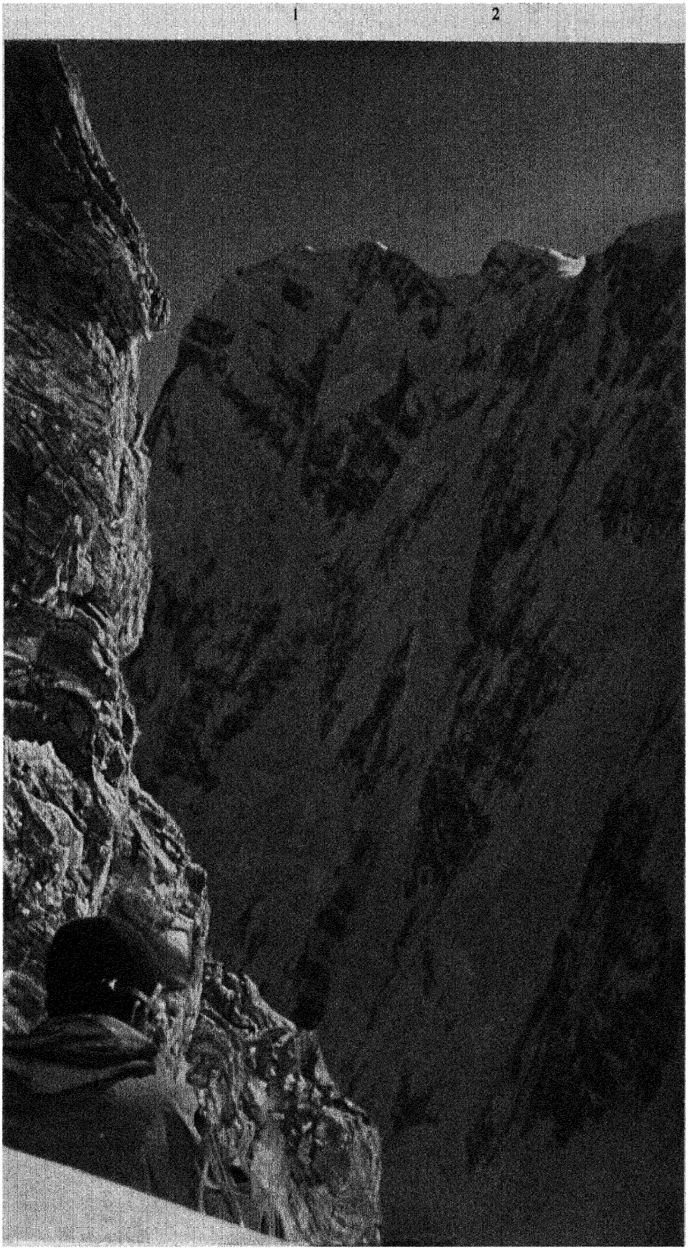
It was particularly difficult—and there is no reason why I should not be quite frank about this—to get hold of the down-filled sleeping-bags. Many months before our departure we had been given definite assurances that these would be supplied, which assurances were promptly withdrawn when the mounting opposition to our project reached its climax. At the last minute, when all the crates containing the expedition's equipment had been handed over to our shipping agents then, and only then, were the sleeping-bags delivered. Aschenbrenner was not able to test them until we were actually at Base Camp.

Boots were one of our greatest problems. We decided on a large simple leather boot after the pattern of the old "Paidar" Himalaya-boot. The uppers extended above the ankles with a canvas cuff, the heel-cap was extremely firm and the lacing as simple as possible. These boots were all provided with the well-tried Luklein-Profile rubber sole which had given excellent service to the Swiss climbers on Mount Everest. We dispensed entirely with tricouni nailing. As protection against cold two pairs of felt linings were provided for each pair of boots. These linings could be changed, they could be taken out to dry, and they also could be used in camp as slippers if covered with a Perlon overshoe. These slippers or camp shoes were quite successful but the smooth overshoes proved unsuitable in snow, causing one to slip helplessly. This drawback could be overcome in future by fitting the Perlon overshoes with a ridged rubber sole. In accordance with Peter Aschenbrenner's strict maxim of "many layers" we wore inside the felt linings one pair of thin and two pairs of thick woollen socks.

For our trousers we purchased Bilgery gaberdine, but we had a great deal of trouble in deciding on the best way of fastening them at the ankles until our friend L. Aschenbrenner of Munich pointed out the advantages of long trousers which pouched at the ankles and which were worn inside the boots. These later gave good service.

The choice of the right type of under-garments was likewise no easy matter. Again the principle of "many layers" applied, this time to the thinnest possible underwear made of pure wool. Excellent products were supplied by many reputable firms, but the pure woollen undergarments after the system of Prof. Jäger found most favour with the team. Even when soaked with perspiration they continued to give warmth. This was a factor of great importance to us, for during our ascent we were often transferred within a few hours from the glaring heat of the ice-fall to a region of 20° C. or more below zero. Whenever during the ascent we, as novices of the Himalaya, found it difficult to reconcile ourselves to our warm clothing Peter Aschenbrenner would sustain us with his classical piece of advice: "Always climb slowly enough to avoid sweating even in warm clothing." He was absolutely right. We climbed slowly and steadily and came to terms with our outfit.

On top of our flannel shirts we all wore one thin and one



View across the Moor's Head towards the south wall of Nanga Parbat, the greatest precipice in the world, dropping 15,000 feet into the Rupal Valley. (1) The Summit; (2) Fore-Summit

thick pullover of pure wool. Some of us wore on top of that a lightweight waistcoat made of parachute Perlon.

Our anoraks were made according to our own specification. The ancient Himalaya anorak of my brother Willy Merkl did duty as a pattern. These anoraks extended halfway down the thighs and were fitted with a broad hood which, however, could be pulled tight around the face by means of an encased cord. The top edge of the hood was broadened to form an eye-shield. The anoraks of double Ninoflex were made to pull on over the head and had no front fastening. There was a large breast-pocket with flap and double buttoned closing, and below, a large muff-like pocket extending right across with a slit opening on either side which could be sealed by a flap. At the back was a space which could be closed by a zip-fastener and which served to accommodate a tent-bag and two packages, one containing emergency rations, the other first-aid supplies. It had to be Hermann Buhl of all people who removed the tent-bag from his anorak when he set out for the summit on 3rd July, 1953.

From the German Perlon Works we received at the last moment the full quantity of 8 mm. Perlon rope woven according to our specification. We also received a number of experimental tents, sleeping-bags and rucksacks, all of Perlon. The Perlon tent could not be used in the lower camps as it was able to withstand only dry snow. It was not practicable in rain or sleet. We reached this conclusion with the greatest reluctance as all Perlon products have a great attraction for the mountaineer on account of their extreme lightness.

We had on the expedition a few large tents, ten storm tents and a large number of house-tents of the well-known "Deuter" make. They proved hard-wearing and utterly reliable; their quality in fact was quite outstanding, and had we not ourselves selected the patent press-stud fastenings everything would have been perfect. But doing up these press-studs from the outside and in extreme cold proved to be a major difficulty, for in no time one's fingers were numb. "Deuter"-tents, yes, but without the press-stud fastenings, should be the watchword for future expeditions.

On the advice of Peter Aschenbrenner the tents were to have as floor-covering the foam-rubber mattresses which had previously been so popular. It took me some time and no small effort to convince friend Peter that inflatable rubber mattresses were preferable on account of their light weight. We finally agreed on the Wetzel mattress which gave excellent service.

It is of course not possible to discuss at length all the considerations which had to be weighed in the balance before each part of our equipment could be passed as being up to expedition standard. Every single item was liable to produce quite a headache, as for instance the problems of the puttees and the mitts. Some were in favour of the type of canvas gaiters which used to be worn for ski-ing and which buckled at the sides. But the majority expressed a preference for ordinary woollen puttees. Then the question of length came in for discussion! The 1-metre puttees were rejected out of hand. We considered whether they should be 1½ or 2 metres. Finally we agreed on the longer ones.

As to the material for the mitts, canvas was well-tried, Perlon was new and goat-hide was what we wanted. Ultimately we took white Perlon for the porters and horse-hide for the Sahibs.

As head-gear we took tropical helmets and felt hats of the Alpine pattern. For the glacier zone we had collapsible sun hats. For warmth we took thin and thick balaclavas. At my special request Frau März, who gave me much motherly advice on such matters, had some soft woollen shawls knitted for us in Munich. These were made like bags open at both ends and could be put to a variety of uses—pulled over the head, wound round the hips or wrapped round the hands or feet.

Thus there were many details which called for consideration, observation and testing, but so many obstacles were so constantly being put in our way, that our precious time ran short. Many a time my thoughts strayed dolefully to the British Everest team who were able to get ahead with their preparations in peace and with every possible support. The Everest equipment was put to the test on the Jungfraujoch during the snow storms of December, that is to say, in weather conditions as severe as any likely to be encountered in the Himalaya in May. These experiments carried Aschenbrenner's principle of "many layers" a few steps further. As already mentioned on page 137, the principle was applied to the sleeping-bags when the team were in Base Camp: two bags were slipped into each other thus providing for an insulating layer of air in between. Likewise the high altitude boots used by the British team were insulated by an inch of kapok fibres contained between an outer layer of glacé kid and an inner waterproof lining to prevent the humidity of perspiration from oozing outward and freezing the uppers stiff. Even the boots for lower altitude use had the insulating layer in the form of a fur lining contained between two leather uppers. Sir John Hunt expended this care on the boots bearing in mind the experience of the French Annapurna expedition, the members of which had to pay constant attention to their numbed feet. It may well be that, had our expedition been able to devote similar care to footwear, Buhl might have been spared the excruciating experience of having his toes amputated.

Another interesting application of the principle of double layers by the British expedition was the use of two air mattresses on top of each other to prevent the cold air from rising along the grooves between the single air tubes; the upper tubes were placed into the grooves of the lower ones, thus sealing off the draught. The top mattress was only partly inflated to ensure a comfortable yielding surface.

I insisted from the outset and contrary to other opinions that the expedition should be equipped with radio and oxygen apparatus. Although we were never in serious need of the Dräger oxygen apparatus and were not able to carry out the intended experimental climbs with and without oxygen, it would surely be irresponsible to embark nowadays on a Himalayan expedition without oxygen equipment. Illnesses which in normal conditions would present no serious difficulties, might in high altitudes take a turn which would endanger the patient's life. All bodily functions, and among them the power of resistance, are adversely affected by the lack of oxygen. Oxygen is one of the most important items of equipment for a modern expedition and should always be easily available to the assault camps.

While still at home it seemed to me that a radio apparatus which would enable the various camps to keep in touch would be an enormous advantage. Accordingly we took with us three Telefunken-Teleport-II-apparatus'. One of them got damaged in transit and we had to make do with the absolute minimum of two. But these two kept going the whole time, even if with steadily weakening batteries, and those comrades who would have been quite willing to abandon the cases at the quayside as so much dead weight, were the first on the mountain to express enthusiasm for the idea of such close contact between the Base and Assault Camps.

APPENDIX (B)

The Hunza Porters

by ELEANOR BROCKETT AND ANTON EHRENZWEIG

UNTIL THE ascent of Mount Everest the public at large had been little aware of the extent to which a modern climbing expedition depends on an efficient porter service. Tensing acquired fame not only for himself but also for his fellow Sherpas, whose loyalty, endurance and sheer sporting spirit impressed the world. Obviously this small and remote mountain tribe possessed unique qualities of body and mind which were not explained by the rigour of their habitat. Yet two major expeditions in 1953 did not make use of Sherpas and hired porters from a small Karakoram tribe, the Hunzas. One was the German-Austrian expedition to Nanga Parbat; the other, starting a few weeks afterwards, was the American expedition to the second highest peak of the world, K2.

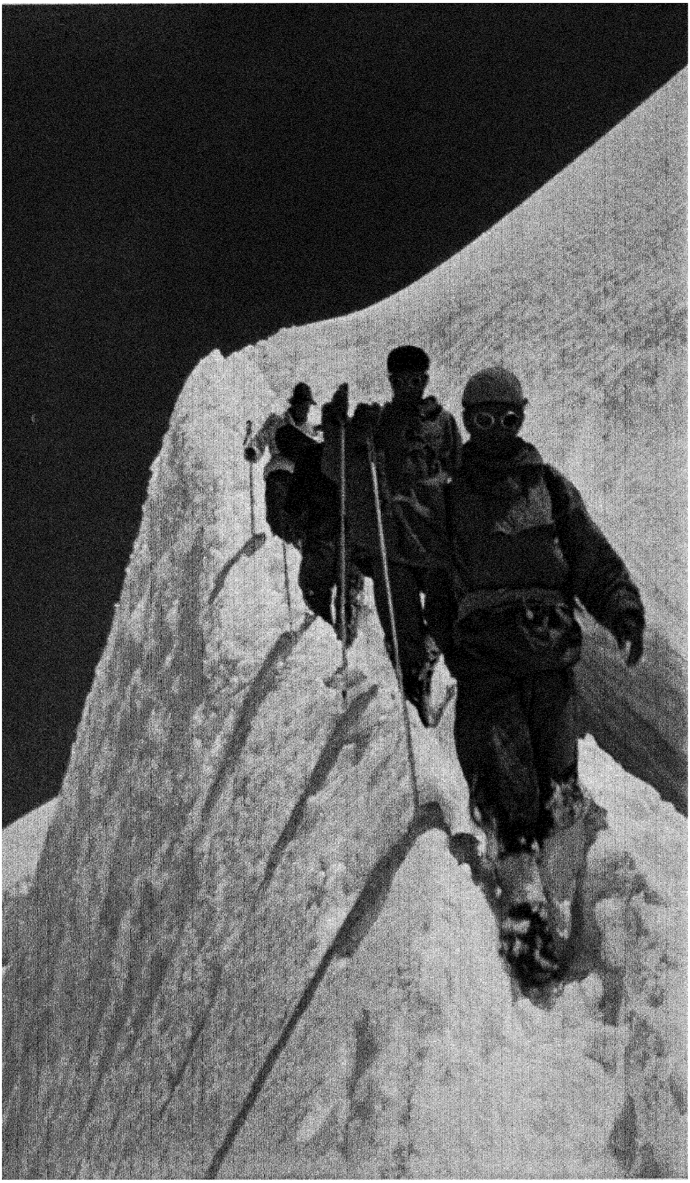
As we have seen, the Nanga Parbat climbers had to make do with Hunza porters; only five Sherpas had been hired, together with a Sirdar not of the highest category. There were three reasons for this: the great demand for Sherpas for the Everest expedition and others in the central and eastern Himalaya; the dislike of Sherpas for Nanga Parbat where so many of their fellows had lost their lives, and finally the preference of Pakistani officials for their own nationals and co-religionists. Hence even this small Sherpa contingent was not allowed to enter Kashmir. The American climbers, fully informed of the position, relied on the local Hunza porters from the outset. Captain H. R. A. Streather of the Gloucestershire Regiment, who was attached to the American expedition as transport officer, had climbed with two Hunza porters on Tirich Mir (Hindukush) in 1950 and had become interested in their long-term training.

It is perhaps this different approach to the Hunzas—their use as a substitute on the one hand and their long-term training on the other—which may account for the very different experience which the two expeditions had with their porters.

When on the eve of the final assault, Walter Frauenberger led his four Hunzas up the Rakhiot Ice-wall he knew that everything was at stake. It is no exaggeration to say that failure was averted by Frauenberger's tactful handling. Even the best of the Hunza porters had not yet learned to identify themselves, as do most Sherpas, with the enterprise of the foreign Sahibs.

The K2 expedition fared much better. Captain Streather was kind enough to state the relevant facts in a private communication. Account was taken from the very outset of the limited training of the Hunzas and they were not expected to carry loads to heights greatly in excess of 21,000 feet, a limitation which was more serious on a mountain of the superior height of K2. Initial difficulties were overcome after the porters gradually gained confidence in themselves and in the leadership of the climbers. Captain Streather thinks that climbers must strive to gain the fullest confidence of the porters in order also to offset the superstitious fear of high mountains which is widespread in these regions (e.g., in Chitral). Hence it would take many more years before a small trained elite corps of porters could be formed. The eminence of Sirdars among the Sherpas shows how greatly single personalities can influence the morale of the whole team; this steadying and disciplining influence (such as was exercised by Tensing on Everest) may be more valuable than the confidence which the climbers themselves might be able to inspire.

It is therefore very difficult, not to say unjust, to draw comparisons between the Hunza porters in their present state of training and the seasoned Sherpa porters. Views on this differ widely. Eric Shipton, with his extensive knowledge of the Karakoram and Himalaya, has considered the relative merits of Sherpas and Hunzas (*The Sherpas and their Country,*



Hunza porters descending from Camp III, making their way over the sharp edge of a *sérac* with a 300-foot-deep crevasse to their left (1953)

Geographical Magazine, August, 1952), and has expressed the opinion that the Sherpas owe their proficiency mainly to the fact that Mount Everest happened to be near their homeland. "It is probable," says Shipton, "that had Mount Everest been in the western instead of the eastern Himalaya another people, the Hunzas perhaps, would have taken their place." He even considers the Hunzas to be better rock-climbers than the Sherpas and believes that with training they could also become first-class climbers in ice and snow.

But other writers are more cautious in their assessment. G. O. Dyhrenfurth (*Zum Dritten Pol*, Munich, 1952), declares that there is a tendency to romanticize the simple, strong and healthy people of Hunza. They are more difficult about their food than are the Sherpas, the latter having learned to make use of European inventions. Sir John Hunt reported that during the conquest of Mount Everest in 1953 the Sherpas soon recognized the advantages of oxygen and readily took to its use. Yet they were equally prepared to do without it. On Nanga Parbat the climbers did not use their down-padded jackets because they were unable to issue similar clothing to the Hunza porters. So the jackets remained stowed away in the Base Camp and the climbers had to rely exclusively on woollen garments which weighed much more. One result of this was that Buhl, always keen on reducing the weight of his kit, was wearing only one thin pullover on the night of his bivouac. The Mount Everest climbers had relied on down suits to reduce the number of woollen garments.

The main difference, then, between the Sherpa and Hunza porters appears to be their attitude towards the climbers and their interest in the success of the enterprise for its own sake. The Sherpas would feel aggrieved if they were not allowed to take part in some particularly difficult climb. When, during the expedition to Chogori (K2) in 1938, Houston chose Pasang Kikuli to be his sole companion for the assault (the same Kikuli incidentally who in 1934 had fought his way down from the Silver Plateau), the Sherpas who were left behind voiced their keen disappointment. Theirs was much more the attitude of the sportsman. Pasang Kikuli died on Chogori the following year when he went out on his own to save an American climber who was marooned in one of the high camps. One feels that such loyalty and initiative cannot simply be matters of training and experience.

The "discovery" of the Sherpas as high altitude porters was made by the renowned General Bruce, who as a young officer accompanied Mummery on his 1895 expedition to Nanga Parbat. It is perhaps incorrect to say that Bruce "discovered" the superior qualities of the Sherpas; he trained them by first learning their local languages and then winning their confidence and their devotion. In a smaller way Walter Frauenberger performed a similar task during the 1953 expedition. The Hunzas called him the "good" Sahib and gave him their trust. According to Aschenbrenner he cooked for them, gave one of them his own socks to encourage him, and lent his foam-rubber mattress to a tired porter while he himself lay in the "mud". But unlike General Bruce with the Sherpas, he could not talk to them or, even more important, understand them. The liaison officer, a Gilgit man, sent the porters on their way with an admonitory lecture and then for some reason remained in the Base Camp so that any effective communication was afterwards impossible. It is legitimate to assume that a more intimate contact such as General Bruce established with the Sherpas is needed to evoke that full co-operation of which the Hunzas are undoubtedly capable.

As hired porters the Hunzas show a side of their personality which is not at all in evidence when they are on their home ground. The German Sahibs found them unreliable and quarrelsome, but at home they are well versed in democratic self-government and display a fine co-operative spirit in common enterprises. To the climbers they appeared moody and sullen, but among their neighbours they have a reputation for unruffled cheerfulness and friendly self-confidence. As for their numerous ailments on the mountain, they are a people whose good health is proverbial. They showed excessive greed in the allotment of rations and the climbers were amazed at the quantities they were able to consume. At home, owing to the stringent poverty of the Hunza country, they subsist the year round on a diet which is wholly inadequate by Western standards, and perform great feats of endurance on a minimum of food.

If the Hunzas appeared to the German-Austrian climbers like Tyrolese peasants, an English traveller had also seen in them a similarity to her own compatriots. To Mrs. E. O. Lorimer, wife of a former Political Agent in Gilgit, they were the least "oriental" tribe in that part of the world: not intellectual, visionary, fanatical, nor artistically gifted; but tolerant, endowed with commonsense, and with a natural aptitude for self-government, that is to say, with attributes to which the English themselves can lay claim. That they should appear to visiting strangers to reflect their own characteristics implies no mean compliment to the Hunzas.

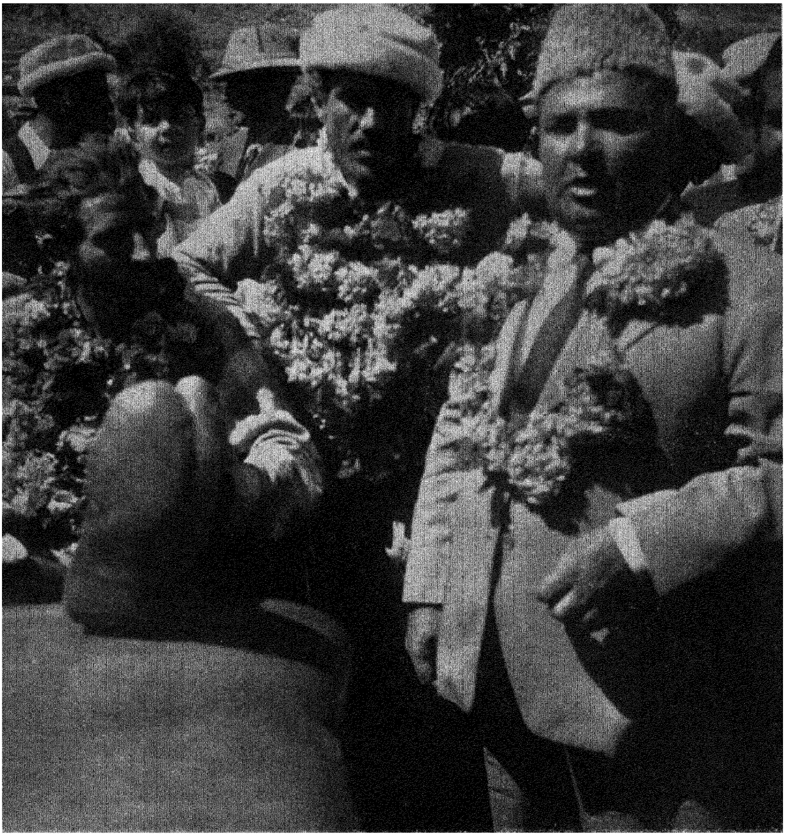
There can be no doubt that the Hunzas are an exceptional people. To build and sustain a simple and gracious culture such as theirs in so unfavourable an environment implies outstanding mental and physical stamina. Their country was described by Shipton as "the ultimate manifestation of mountain grandeur . . . the very heart of the greatest concentration of high mountains in the world . . . difficult to describe without indulging in superlatives." In the Hunza valley Lord Curzon counted eight peaks of over 24,000 feet within a range of seventy miles. To reach Baltit, the capital of Hunza, from Gilgit, one has to follow the gorge of the Hunza river round Rakaposhi, the great Karakoram peak yet unclimbed, which like Nanga Parbat soars in splendid isolation.

The central Hunza territory, seen from Gilgit, lies behind Rakaposhi. The dangerous trail along the Hunza river is part of the long caravan route, now closed by the cease-fire line, which once led from the Vale of Kashmir over passes more than 14,000 feet high to Kashgar in Chinese Turkestan (Sinkiang). For centuries a steady trickle of adventurous traders brought silk, tea and porcelain to India, and spices, gold and ivory back to Kashgar. The prospect of making a fortune led the traders to brave the great hazards of the route, particularly the sudden landslides along the river gorges. Within the Hunza principality the trail is often little more than a rocky ledge two feet wide, engraved into the cliff a thousand feet above the valley floor with thousands of feet of almost vertical cliff soaring again above it.

The edge of the track is left in the natural state and easily crumbles away. Sometimes the ledge carrying the track is interrupted by sheer cliff for twenty feet or so, after which the ledge reappears again. These gaps are bridged by "galleries" in the building of which the Hunzas have developed a remarkable technique. Flat stones are wedged into any crevice visible in the rock wall; on these more rocks are laid, each layer protruding a little and interlaced with brush wood. The traders of old offered up prayers of thanksgiving every time such a stretch was successfully passed. The immense cliffs facing each other across the Hunza gorge are bare of all vegetation, their brown surfaces being constantly swept clean by falls of rock, mountain debris and floods of mud. No spring gushes from these sombre walls. Here and there natural terraces have been formed by accumulations of earth which is little more than pulverized rock. These terraces may lie a thousand or more feet above the river bed and are connected by the tenuous thread of the caravan trail. It is upon this poor soil that the Hunzas must depend for their subsistence.

Clinging to the north wall of Rakaposhi lies the rival state of Nagar, whose people are closely related to the Hunzas linguistically and racially, and yet are curiously different. The soil is richer in Nagar and is protected from the scorching sun by the shadow of Rakaposhi. But it is said that the lack of sun has made the Nagar mind sombre and sour in contrast to the merry disposition of the Hunzas. The Nagars have adhered to a strict Moslem faith and condemn the Hunzas for their "heresy" and their custom of adorning their walls with pictures of their Imam, His Highness the Aga Khan, which they regard as something bordering on idolatry.

Until 1891 the Nagar and Hunzas engaged in sporadic raiding against each other and in the surrounding territory. Then the British Raj decided to put a stop to this nuisance. The "Gilgit Road" was built and a full-scale military campaign was launched. It had the desired effect and the rulers of Hunza and Nagar and their people changed their ways. They were allowed to remain independent in their internal administration and the royal families of Hunza and Nagar kept the peace. To-day the



Reception in Gilgit. Right foreground, the Political Agent

beautiful medieval castle of the Mirs of Hunza, built into the hillside at Baltit, stands empty, while the ruler lives in a modern American-style residence and his subjects dwell in their homesteads scattered about the valley terraces.

The engaging pride and self-respect of the Hunzas to-day is testimony to the success of the British policy of subduing the country and then letting it run itself. Nowadays the Hunzas have no army, pay hardly any taxes and the autocracy of the Mir is mitigated by human tolerance and far-reaching decentralization. The hard struggle for existence goes on and every spring the danger of starvation is acute. The small population is kept constant by the custom of temporary sexual abstinence after the birth of each child. Through long usage they are able to build and sustain their athletic bodies on a diet which by Western standards would be 50% deficient in quantity and would contain only 10% of the necessary proteins. They live mainly on chapatis (cakes made of barley flour, salt and water) and can afford meat only twice or three times a year. The milk of their cattle has a very low fat content as there is no grazing land. The fruit crop, particularly apricots which grow wild anywhere, is an important addition to the diet.

All the industry and ingenuity of the Hunza goes into the levelling and watering of his small terraced fields that they may every year yield their poor harvest. The rainfall is negligible, perhaps two inches per year. No snow falls on this barren landscape during the cold but short winter months. There are no springs; and the river lies 1,000 feet below in the gorge. The main channel supplying most of the central part of the principality was dug over a hundred years ago with wooden shovels and represents a major feat of engineering and concerted communal effort. Careful rotation of crops is practised and every scrap of dung is collected. This incidentally makes for a degree of cleanliness and a lack of squalor unparalleled in any similarly primitive peasant economy. There is hardly any wood for fires and the short but grim winter months are spent in the draught-proof and windowless living-rooms of their lean-to stone dwellings. The rest of the year, day and night, is lived practically in the open. Spring brings the inevitable period of near-starvation. The Hunzas remain cheerful on such food as turnip-tops and edible weeds and only the children complain of hunger. As soon as leaves begin to sprout, the foliage of all but the fruit trees is stripped and fed to the domestic animals. As the snows recede from the heights above, revealing here and there small patches of green, the young men take the cattle up the precipitous walls of rock and put their beasts on these minute and lofty pastures for a few weeks' grazing. If one reflects what this must entail in terms of mountaineering technique, to say nothing of the construction of the vertiginous cliff paths and the systematic irrigation of the narrow, high-perched terraces, Shipton's appraisal of the Hunzas as the best rock-climbers in Asia seems acceptable enough. It is recorded that an American visitor to the Hunza country was invited to take part in the hunting of Marco Polo sheep which had been sighted only "a few miles away". It turned out that these few miles had to be counted vertically, straight up to a height of 18,500 feet, and the Hunzas found it disappointing that their guest could not manage the climb at one go. The same visitor timed a messenger sent on foot from Baltit to Gilgit; the 65-mile route was covered in nineteen and a half hours.

The Hunzas cling tenaciously to their ancient language, their racial purity and their age-old customs, and their houses are built on the pattern of prehistoric Central-Asian dwellings recently excavated. But their conservatism cannot be explained purely in terms of their geographical isolation, for they have lived astride the main caravan route of Central Asia at the meeting place of two very divergent cultures. Their cultural independence and poverty cannot be the natural outcome of fortuitous isolation, but the result of deliberate preference and national pride. To-day the Mir of Hunza has not been afraid to open his country to the jeep, and an internal, battery-fed telephone system enables him to speak every day to the village elders. The Mir has dismissed fears that disease would spread to his people through closer contact with the outside world with the counter-argument that modern medical services would become available at the same time. But he expressed anxiety that the rumoured gold finds in his principality might corrupt the old ways of life. Fortunately the rumour proved false. Here, indeed, is poverty self-imposed and a fitting pride in the virtues of a fine and ancient civilization.

How then can this picture of cheerfulness, poise, friendly co-operation and frugality be reconciled with Elizabeth Knowlton's description of the Hunza porters who took part in the German-American expedition of 1932? She described them as "our dark, unreliable, mysterious, most frequently sullen and quarrelsome Hunzas" and contrasted their behaviour with the "child-like open-mindedness and cheerfulness" of the Sherpas. How can their rapacious greed for food and their flagrant dishonesty be reconciled with their customary frugality and restraint which would never allow them to touch a grain of corn set aside for seed?

It may be profitable to recall the attitude of the Hunzas to the outside world which once gained them the reputation of being robbers and murderers. In 1866 the eminent linguist Leitner, to whom we owe the first study of the Burusho language common to the Hunza and Nagar principalities, crept into Gilgit disguised as a mullah, carrying his own featherweight cork bed and with two revolvers and a few pots of "Liebig" meat extract in his pockets. He spoke of the wild and impious people of Hunza who revered the Aga Khan, but he doubted whether the Aga Khan knew how "wicked" they were and they how pious he was (*The Hunza and Nagyr Handbook*, 1893, Woking Oriental Institute). Old enmities have not been forgotten and tension still exists between the rival principalities of Hunza and Nagar. For "outsiders" the Hunzas have always worn a mask. The Sahibs from Europe who could not speak their language and were ignorant of local customs may have failed to evoke the co-operative spirit of the Hunzas which was reserved for home consumption, but instead became the object of the aggressiveness which was equally ingrained in that side of their character which they were accustomed to display to the outside world.

The solemn undertaking to support the German climbers which the Hunza porters had to give to their Mir in 1953 certainly did something to counteract their innate hostility towards "outsiders", but could not help to establish the closer human contact which alone would have brought out their singular qualities. Aschenbrenner obviously understood them when he said: "The Hunzas are not coolies and will not be called by that name. They consider themselves to be gentlemen who are helping other gentlemen and accordingly expect to be equipped in the same manner. They have clear-cut ethical standards and know the meaning of loyalty and comradeship."

If free rein is to be given to their great potentialities for co-operation and endurance, which to date have been so unhappily obscured by moody unreliability, some attempt must be made to meet them on their own ground. Will there be another Bruce who will master the Hunza language, make himself familiar with Hunza custom and win the devotion and respect of this dignified people? If such a man should appear on the Western Himalayan scene, the Sherpas might well have to look to their laurels.

APPENDIX (C)

About Oxygen

THE BODY has to "burn" oxygen to maintain its metabolism. If oxygen is withheld the life of the cells will cease. The saturation of the blood with oxygen depends to a large extent upon the pressure obtaining in the atmosphere. There must exist a certain relationship of pressure between the air in the lungs and the blood; the oxygen is literally pressed into the blood by this difference in pressure. The smaller the difference the less oxygen can be absorbed by the blood.

In greater altitudes the pressure in the lung tissues decreases and with it the saturation of the blood with oxygen. This diminution becomes noticeable only in altitudes above 10,000 feet; up to this limit the blood's reserves of unused oxygen make up for the decreasing supply. At an altitude of 23,000 feet the blood is saturated only to 70% of the normal amount.

Nevertheless, the experience of climbers on Himalayan expeditions has shown that altitudes up to 23,000 feet can be tolerated even after a prolonged period at these heights; the body has at its disposal certain faculties which enable it to adapt itself to the changed environmental conditions. To begin with it reacts as it would to any physical exertion: the heart beats faster and the blood circulates more quickly; at the same time the rate of breathing increases and with it the metabolism of oxygen. An even more important adjustment is the increase in the number of red corpuscles which carry the oxygen in the blood; their number can rise from 5,000,000 per cubic millimetre to 7-8,000,000 per cubic millimetre within four weeks. With this increase the blood can absorb more oxygen and improve its supply to the cells. If this adjustment is made the originally increased pulse rate may sink again, although it will never, in high altitudes, return altogether to normalcy.

As a third adaptation the body will try to economize in oxygen by curtailing or moderating its functions. Thus the climber becomes lethargic and needs great determination and will power if he is to pursue his climbing objectives. The comparatively small physical exertions involved in pitching a tent or preparing food loom large and call for tremendous effort.

All these adaptations go to make the successful acclimatization of a climber. The degree of acclimatization varies widely with the constitution of the individual. It may also be affected by the enormous fluctuations in the outside temperatures and the damaging influences of sun radiation. The most favourable zone for acclimatization is normally around 19,000 to 20,000 feet. Beyond this altitude, at about 23,000 feet, a critical zone is reached where successful acclimatization can no longer be expected. From 25,500 feet onwards the climber enters the so-called "death zone". The only treatment for the ensuing symptoms is to restore the normal supply of oxygen. The symptoms consist in the first place of the very phenomena which at lower altitudes would have assisted the process of adaptation, but in an exaggerated form. The pulse rate increases furiously and the climber pants for breath.

Loss of carbon dioxide may also contribute to breathing difficulties. As a consequence of the continuously deeper and quicker breathing, more carbon dioxide is given off than under normal conditions. And through the impoverishment of its carbon dioxide content the blood also changes its physiological properties. This change was assumed by Mosso to be the principal cause of mountain sickness, an opinion which is now considered obsolete. But the carbon dioxide acts as the normal regulator of the breathing function by stimulating a rhythmical activation of the breathing muscles without conscious intervention of the brain. A diminished carbon dioxide content of the blood may cause a disturbance in the breathing function in the following manner: After a long pause respiration starts with very shallow breaths which gradually increase into a very deep and panting breathing movement known as Cheyne-Stokes breathing. The lack of oxygen at high altitude is consciously experienced as a definite "hunger" for air. The brain reacts soonest to its deprivation of oxygen. On the physiological side, the disturbance of proper brain functioning may cause severe headaches, vertigo, sickness and vomiting.

The subjective mental phenomena may be equally marked. The climber suffers from feelings of great lassitude, and general lack of will power. Lapses of consciousness may occur and the faculty of reasoning is affected. In its last phases the ascent of a peak above 26,000 feet approximates to a race with death. The pulse and respiration rates reach their maximum and can hold off death only for a short time by keeping the oxygen deficit as low as possible. Here the efficiency of the circulation and the condition of the heart may play a decisive part. Buhl owes his success not only to his determination and technical excellence, but also to his extraordinarily sound heart. His report of the dramatic hours of his descent indicates that he was suffering seriously from mountain sickness.

The aural and optical hallucinations to which he was subject on the second day are typical. Flyers and climbers often report that their mucous membranes tend to bleed; Buhl also mentions that his saliva became bloodstained. It is more difficult to assess Buhl's symptoms as far as the higher functions of the brain are concerned. It is known from precise observation in the laboratory, that the highest mental functions are particularly liable to be affected by a lack of oxygen. Changes observable in a person's hand-writing can be taken as a reliable indication of resistance to the effects of high altitude. The complexity of the higher mental functions is such that their disturbance may produce different symptoms in different individuals; it may cause the lethargy, drowsiness and lack of will power already mentioned, but it can also produce the state of over-excitement which was noticeable in Buhl after his return. In all cases, however, and this is significant, the normal activities of consciousness are considerably restricted and a diminution of the rational critical powers may lead to a serious underestimation of objective dangers, as one is tempted to infer from Buhl's improvised changes in his plan of assault.

Inevitably all the finer faculties for aesthetic pleasure in natural beauty and for the full enjoyment of the adventure which, in normal circumstances, would make a first ascent a rich and unforgettable experience, are utterly suppressed. If the determination to reach the objective remains intact, it is carried through as the automatic fulfilment of a pre-arranged and unalterable decision. It will be remembered that when Buhl was on the last lap to the summit he said: ". . . I was simply not conscious of the fact that I was at that moment at grips with our own Nanga Parbat, an unclimbed 8,000 metre peak, the summit to which no less than seven expeditions had gone forth, the mountain which had claimed so many lives . . . it might just as well have been any other summit in my native Tyrol."

Another serious hazard of high altitude climbing, that of contracting frost-bite, is more intimately connected with the general lack of oxygen than might be thought at first. The heat of the body is produced by the "burning" of oxygen. A lack of oxygen will therefore reduce the heat of the body and expose the extremities to the danger of frost-bite.

Although the Mount Everest Expedition of 1953 has established the usefulness of oxygen equipment, it is still open to question exactly to what extent oxygen equipment can counteract the ill effects of low atmospheric pressure. However, if the oxygen equipment now available can be further developed and made lighter in weight in relation to the volume of oxygen it can supply, then it might reasonably be hoped that the elimination of the serious biological risks which now beset the climber in high altitudes may be almost completely overcome. The Himalayan climber will then be able to concentrate exclusively on the formidable technical problems which confront him.

APPENDIX (D)

TABLES OF THE WEATHER OBSERVATIONS ON NANGA PARBAT

TABLE 1

WIND DISTRIBUTION AT THE BASE CAMP AND CAMP I

(Number of Observations)

		N	NE	E	SE	S	SW	W	NW	C
Base Camp	07 h.	—	—	1	1	—	4	1	—	3
(10 fair days)	14 h.	—	1	1	1	—	4	3	—	—
	19 h.	—	1	1	2	1	2	3	—	—
all days	all fixed hours	3	4	3	8	10	24	13	5	16
Camp I	all fixed hours	9	—	—	14	17	9	—	4	10
(8 fair days)	all fixed hours	2	—	—	5	9	2	—	1	5

TABLE 2

MEAN TEMPERATURES AT THE BASE CAMP AND CAMP I (35° 18″ N., 74° 36″ E.) in ° C.

	Fixed hours				*Daily mean*	*Altitude m.*
	cca.03h.	07 *h.*	14 *h.*	19 *h.*		
Base Camp, 21.5–2.6	−0·9	+ 2·3	+ 4·4	+ 2·4	+ 1·8	3,960
Base Camp, 29.6–13.7	—	+13·2	+16·1	+11·1*	+12·9	3,960
Camp I, 3.6–24.6	−4·2	+ 0·5	+ 4·5	+ 1·5	+ 0·8	4,450
Karakoram, June†	—	+ 5·7	+15·8	− 5·8	+ 9·1	4,500

* 21 h. instead of 19 h

† for comparison (after Bleeker)

TABLE 3

VERTICAL TEMPERATURE LAPSE RATE ON THE NANGA PARBAT

Altitude *m.*	*Mean Temperature* ° *C.*	*Remarks*
(Base Camp) 3,960	+7·3	mean of the periods stated in Table 2*
(Camp I) 4,450	+2·2	period 9–24.6
5,320	−0·1	all in all 12 observations, corrected
6,100	−6·0	all in all 7 observations
6,700	−9·7	all in all 5 observations

* 21.5–2.6; 29.6–13.7

TABLE 4

PROBABILITY OF DAYS WITH PRECIPITATION

Place	*Long.* ° *E.*	*Lat.* ° *N.*	*Altitude* *m.*	*May* %	*June* %	*July* %	*Aug.* %	*Sept.* %	*Precipitation* *mm.*
Gilgit	35·9	74·4	1,490	8	4	4	5	4	64
Dras	34·4	75·8	3,066	17	7	5	5	4	126
Skardu	35·3	75·6	2,288	6	2	3	4	3	55
Leh	34·1	77·6	3,514	2	2	5	6	3	44
Karakoram*	35–36	75–77	4–6,000	—	49	32	37	32	
Nanga Parbat	35·3	74·6	cca. 4,000	65†	51†	31‡	—	—	
Lhasa*	29·7	91·1	3,932	32	40	74	74	43	(1,583)

* 4 years. † 1953, partly 1937. ‡ 1953.

TABLE 5

DIURNAL VARIATION OF RELATIVE HUMIDITY (IN %)

Place	*Fixed hours*			*Daily mean*
	07 *h.*	14 *h.*	19 (21) *h.*	
Base Camp, 3,960 m., 21.5–7.6	63	59	73	65
Base Camp, 3,960 m., 28.6–13.7	45	49	55	50
Level, 4,300–5,320 m., 3.6–24.6	71	69	77	72
Karakoram, 4,500 m., summer	58	41	62	54
Hunza region, 4,000 m., summer	55	31	37	41

TABLE 6

RELATIVE HUMIDITY IN %

Place	*May*	*June*	*July*	*Aug.*	*Sept.*
Gilgit	47	40	44	47	49
Leh	41	41	55	59	50
Karakoram, 4,500 m.	—	46	38	51	54
Nanga Parbat (1 year)	(63)	71	51	—	—
Lhasa	38	48	57	61	54

TABLE 7

MEAN CLOUDINESS IN FRACTIONS OF 1/10

	Fixed Hours			*Daily mean*
	07 *h.*	14 *h.*	19 (21) *h.*	
21.5–2.6	3·6	8·3	6·7	6·2
3.6–24.6	2·7	5·7	4·0	4·1
29.6–13.7	1·2	3·9	1·7	2·3
Mean	2·5	5·9	4·0	4·1
Hunza region*	4·2	4·6	3·4	4·1

* for comparison (after Bleeker)

TABLE 8

MEAN CLOUDINESS IN %

Place	*May*	*June*	*July*	*Aug.*	*Sept.*
Gilgit	44	30	39	39	34
Dras	38	30	40	41	28
Skardu	45	33	41	41	35
Leh	46	39	47	45	34
Karakoram	—	50	47	42	41
Nanga Parbat (1 year)	(61)	42	(21)	—	—
Lhasa	49	49	78	75	61

TABLE 9

FREQUENCY OF DIRECTIONS OF CLOUD MOVEMENT
(Number of Observations)

	N	NE	E	SE	S	SW	W	NW	a	q	n
Level 5–6 km., all days	2·5	1	1	–	1	6	11·5	1	265°	62%	24
Level 6–8 km., all days	4·2	2	–	1·5	1·5	12·5	14	8	268°	55%	44
Level 9–10 km., all days	–	–	–	–	1	65	4	3	256°	77%	13
Level 6–8 km.	–	–	–	–	–	8·5	6·5	1	243°	92%	16
Level 6–8 km.	4·2	2	–	1·5	1·5	4	7·5	7	295°	51%	28
Level 6–8 km., dry days	5	2	–	–	0·5	3	6	5·5	305°	59%	22
Level 6–8 km., days with precipitation	–	–	–	–	1	9·5	8	0·5	252°	76%	22
Level 6–8 km., fair days	3·5	2	–	–	–	1·5	6·5	4·5	306°	66%	18

a = resultant direction (from frequency; 270° = W, 360° = N)
q = persistence in %
n = total number of observations

TABLE 10

MEAN TEMPERATURES OF THE UNDISTURBED FREE ATMOSPHERE ABOVE NW-HIMALAYA AND KARAKORAM IN 35° TO 36° LATITUDE (IN ° C.)

Month	5,000 *m.*	6,000 *m.*	7,000 *m.*	8,000 *m.*
May, October	−6	−13	−20	−27
June, September	−3	− 9	−15	−22
July, August	+1	− 5	−12	−19

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